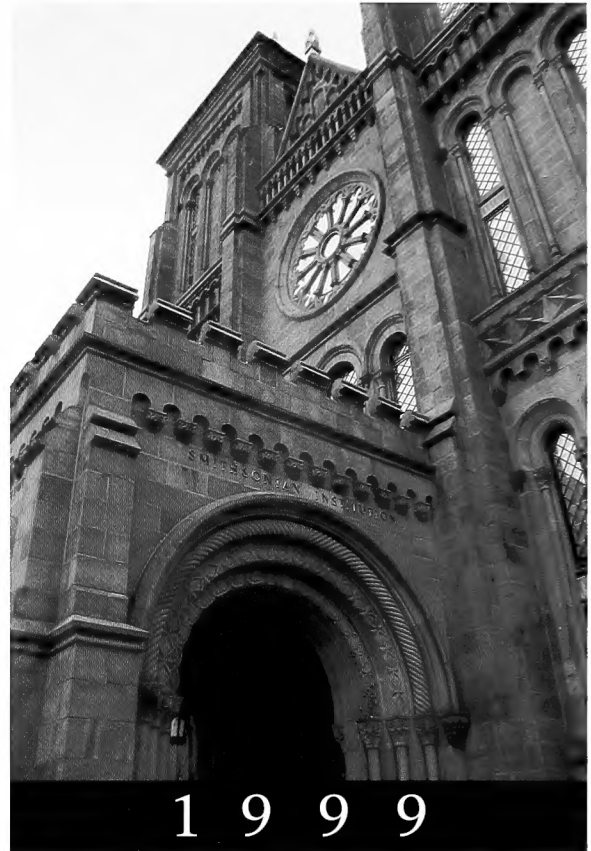


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Annals *of the*  
Smithsonian  
Institution



National Collections Program

Smithsonian Institution Archives

Washington, D.C.



Smithsonian  
Institution



# Annals of the Smithsonian Institution 1999



Smithsonian Institution

National Collections Program  
Smithsonian Institution Archives  
Washington, D.C.

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# Smithsonian Institution

The Smithsonian Institution was created by act of Congress in 1846 in accordance with the terms of the will of James Smithson of England, who in 1826 bequeathed his property to the United States of America "to found at Washington, under the name of the Smithsonian Institution, an establishment for the increase and diffusion of knowledge among men." After receiving the property and accepting the trust, Congress vested responsibility for administering the trust in the Smithsonian Board of Regents.

## Board of Regents and Secretary

September 30, 1999

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September 30, 1999

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# Statement by the Secretary

I. Michael Heyman

## Museums and the New Millennium

In the last five years, from 1994 to 1999, I have had the opportunity to report to you on the many ways that the Smithsonian serves the nation. Last year, for example, I took up the theme of the Smithsonian's extensive commitment to the increase of knowledge through scientific research and scholarship in the humanities. This, my final report to you as Secretary, is an attempt to share my view of the Smithsonian's significant role as a family of great museums. In some ways, what has happened to museums in our society in the decades since the end of World War II is nothing less than miraculous. And there is no better way to understand these changes than to look at our remarkable Smithsonian Institution.

When we organized our 150th anniversary celebration, which I described in my 1996 report, researchers went back to the hundred-year commemoration, in 1946, and discovered to our collective amazement that the entire staff of the Smithsonian was then about 400 people and the number of museums, incorporating various kinds of collections and stretching various definitions, was four. Fifty years later, the staff had grown to roughly 6,500 and the number of museums to 16 and research institutes to five. In 1946, our museums recorded more than 2 million visits. At last count, that figure was more than 28 million. By any standard, that's amazing growth.

This expansion reflects the vitality of the American museum community in general. There are more than 8,300 museums listed in the *Official Museum Directory*, which some actually consider an undercount. According to the summer 1999 issue of *Daedalus*, the journal of the American Academy of Arts and Sciences, when statistics were last reported in a 1989 study called *Museums Count*, "only 4 percent [of America's museums] were founded before 1900. Three-quarters have been founded since 1950 and 40 percent since 1970." In the last two years of this waning century, *Daedalus*

reports, it is estimated that 150 museums will be built or significantly expanded.

The Smithsonian is a part of this forward momentum. At the end of September 1999, I had the pleasure of breaking ground with Native Americans from all regions for the National Museum of the American Indian to be built in the shadow of the Capitol on the last available site on the National Mall. My successor as Secretary, Larry Small, will have the pleasure of presiding over another great occasion one day, the opening of the enormous extension to the National Air and Space Museum at Dulles Airport outside Washington, D.C. Clearly, museums count more than ever before, in every meaning of the word.

But why?

Let me make a few guesses.

At one level, the explosive growth of museums may simply have a great deal to do with the growth in prosperity, in the desire for meaningful leisure activities, and in the expansion of our college-educated population, all of which have marked the postwar decades. At the Smithsonian, we have particularly benefited from the growth in national confidence in the era some have called the American Century. At least four of our Smithsonian museums—the National Museum of American History, the National Museum of American Art, the National Portrait Gallery, and, above all, the National Air and Space Museum—burst forth out of that need to represent our national pride. Other museums around the country have come to express civic, regional, community, and ethnic pride in the same spirit.

As a corollary, I suspect museums have come to be places of validation in a society that has seen the erosion of many social institutions traditionally representing trust and authority. While religion and family retain their strong foundations for many Americans, other Americans are experiencing uncertainty and drift. Museums have always been places where society asserts that certain things are impor-

tant. But increasingly, all of society, not just traditional elites, look to museums and similar organizations to recognize values, to represent permanence in a changing world, and in general just to sort out what matters.

This process has proven particularly vitalizing for many of America's ethnic communities. The Museum of African American History in Detroit has become a crucial institution in the life of its community. The United States Holocaust Memorial Museum has pioneered a way to sort out one of the darkest chapters in human existence, not only for the Jewish community but for the nation as a whole. And the Japanese American National Museum in Los Angeles has defined for its community and the world at large the nature of the Japanese American experience.

Many in the museum world are embracing a new notion of public service that is proactive. Increasingly the argument is being made that museums must demonstrate their usefulness to their communities. It is no longer enough to simply represent the good and the beautiful. In a speech earlier this year, my Smithsonian colleague, Stephen Weil, imagined at least some of the goals museums must aspire to:

Museums can provide forms of public service that are all but infinite in their variety. Museums can inspire individual achievement in the arts and in science, they can serve to strengthen family and other personal ties, they can help communities to achieve and maintain social stability, they can act as advocates or play the role of mediator, they can inspire respect for the natural environment, they can generate self-respect and mutual respect, they can provide safe environments for self-exploration and ever so much more.

Seeing museums as not only passive environments for inspiration but actual problem solvers for American society is a new and exciting approach. Sometimes the goals are quite targeted. I noticed recently, for example, that the Drug Enforcement Administration has just created what amounts to a museum on addiction to show the terrible costs of a national blight and the strategies used to combat it.

But goals for museums can be very broad in scope as well. My own hope for the Smithsonian, and particularly for its National Museum of American History, is that it can play some part in healing some of the fractures in our social framework, in creating an inclusive sense of national identity in the new century. That may, in fact, be our most important task.

I had the opportunity to make this point in the presence of President and Mrs. Clinton at a ceremony launching our effort to conserve the Star-Spangled Banner:

We at the Smithsonian recognize our roles as custodians of our most loved national treasures. But we see as an extension of that responsibility our obligation to provide a national place where the many communities of America can learn about each other and honor each other's past and present. We are bound together as a people not in uniformity but in shared hope and, if we get it right, mutual respect.

There is one sphere of public service for which the value of museums is just beginning to be understood—that of public education. We understand, of course, that museums have long had an important role in what is called informal education. They are, after all, places to discover and to learn about the world. But the emerging museum of the future, which takes its educational responsibilities seriously, will find itself more and more a full participant in classroom education. As I described in my 1997 report, this responsibility goes beyond the important task of providing materials that are useful to teachers. The Smithsonian, as I mentioned, in the fall of 1996 forged a partnership with the District of Columbia Public Schools to establish two Museum Magnet Schools, one elementary and one middle school. Students in these schools collect, study, and interpret objects to learn science, art, and geography, among other subjects. Like the curators they resemble, the young people conduct research and then choose ways to communicate their discoveries to others.

Often it is the private sector that has shown us how to reinvent our educational involvement. I am particularly intrigued by the recent partnership between our National Museum of Natural History and Voyager Expanded Learning, Inc., to create after-school and summer programs that enrich and enliven the educational experience. A particular favorite of mine is the four-week Smithsonian T-Rex program that involves such hands-on experience as the casting of dinosaur teeth to separate fact from fantasy under the guidance of scientists.

Equally exciting is our own Smithsonian Early Enrichment Center for preschoolers. Immersed in object-based education, these three- and four-year-olds are exceeding expected achievement in all areas. Two thirds of the center's preschoolers score in the 99th percentile in nationally normed science tests upon completion of the program. That's exciting by any standards and gives museums the hope of making a difference in ways we did not even suspect a decade ago.

That's the good news. But we need also to examine the challenges and uncertainties that museums face in the future. Challenges, of course, can lead to opportunities for reinvention, but we have to be aware of them and intelligent in our response.

Because museums have so many responsibilities and are the focus of so many expectations, the pressures on staff and directors to clarify what it is they do and how to manage and increase their resources are growing at an incredible rate. We used to think of the ideal director of a museum as a professional risen from the ranks of one of its key scholarly fields, but now directors must deal with issues of management, fund-raising, and political interaction unimaginable in quieter days. Take the questions of corporate sponsorship or the launching of business ventures. Each entails risks to an institution that values its integrity, but the risks can be handled, I think, and are outweighed by benefits. Taking on these new challenges represents a new way of thinking that incorporates ideas of true partnership with the private sector, involving strategies for using the marketplace without going down pathways that conflict or seem to conflict with our mission.

There's another challenge to be met, one that also creates its fair share of worry among my colleagues. It is the increasing

competition for the public's attention from the many dimensions of entertainment available on television or movie screens, in the great theme parks, and even in the retail universe represented by Niketown or the Hard Rock Cafés around the nation and the world. A recent article in the *Harvard Business Review* has created a sensation in both the museum and the retail worlds by heralding the arrival of what the two authors call "the experience economy." Cultural institutions must increasingly appeal to an audience making choices among a variety of experiences and must learn not only to recognize this role but also explicitly to define what is unique and valuable in the educational and aesthetic experiences they offer.

I am one who believes that cultural institutions have a responsibility to engage actively with the popular culture while not confusing our purposes with those of the commercial world. One of my initiatives that has surprised a number of traditionalists has been to open a discussion with Hollywood about possible partnerships in the creation of what I would call a quality brand in films, television, and possibly even theatrical performance. At the moment, I am optimistic that we can create programs with both educational and entertainment value.

We have curators working on Mel Gibson's next film, an American Revolutionary epic, *The Patriot*, now in production. We are also planning three films for television on the African American experience, with some of the best actors, producers, and directors in Hollywood. Museums can and must have influence far beyond their buildings.

Less surprising but equally important is my commitment and that of my colleagues in other museums to use the latest technologies to make available what we have to offer in new ways to audiences throughout the nation and the world. One of my first statements as Secretary was to announce my hope to create an electronic Smithsonian, and I have seen our Web site become one of the most visited cultural sites in the world. We are committed to digitizing millions of our objects in order to guarantee universal access to our collections, only 3 to 4 percent of which we can actually display.

But digitization is, of course, just the beginning. We can all foresee a future when not only flat images but the full three dimensions of objects can be easily communicated electronically so they can be explored in all their wonderful complexity. We have already experimented at the Smithsonian with a CD-ROM that effectively uses impressive 3D technology. We will also, I am convinced, one day have curators able to create cyber-exhibitions that use the unique properties of that medium to connect objects to contexts in space and time. Imagine, if you will, an object in our collection of Native American artifacts returned visually to the world that created it hundreds of years ago, or a natural object morphed back to its place of origin in the natural world.

The challenge here, of course, is not of imagination; we can meet that. The challenge that must be solved is resources. It is expensive to do what we must do electronically.

And it is not only the electronic world that will test our resources. Where will we find the funds to collect and conserve those millions of objects in our care? None of them are getting any newer. And what of the buildings to house

them? The Smithsonian's National Museum of the American Indian requires, in addition to the museum we are building on the National Mall and the exhibition facility in New York, a large, separate resource center to house more than a million objects in ways that respect their preservation needs on the one hand and their many uses on the other. And to mention another problem, where do you put a jumbo jet or new spacecraft models? One of those could fill up an entire wing of the National Air and Space Museum on the Mall. So we build bigger and bigger facilities for them.

The issue of the economics of museum creation and preservation opens up a host of related issues as we contemplate our future as valued social institutions. How do we judge our usefulness, our reason to exist? When we are asked if we are well run, what do we say? What is our standard and process of accountability? These, as Steve Weil argues, are not a matter of insisting that museums look like the commercial world but only that they more clearly articulate their own goals and their basis for evaluating whether they are meeting them.

I found the summer 1999 issue of *Daedalus* devoted to the subject of museums to be fascinating precisely because it revealed that museums are just now beginning to ask tough definitional and structural questions about themselves, much as has already happened in other contexts in the modern world. Think, for example, of the realignment of the information and global economy or of the continual reinvention of both our political parties.

One writer wondered whether to be called a museum a place had principally to house and display objects. Another wondered whether museums really do "shape anyone's values, validate anyone's identity, impose any lasting sense of order." And another asked museums to add to their curatorial expertise "collaboration with filmmakers, game creators, artists, poets, storytellers."

There was another challenge to traditional ways of thinking in *Daedalus* that I found particularly telling. Many museums, historically, have been quite territorial in their view of their responsibilities, more competitive than cooperative in the building and sharing of their collections. One of the Smithsonian's initiatives in the last five years that I am most proud of is our Affiliations Program, which establishes partnerships with museums and planned museums throughout the country, making available to them Smithsonian collections and expertise. One example, and in fact the first of our arrangements, has been the cooperation of our National Museum of American History with a group in Bethlehem, Pennsylvania, to create in the former steel mills a place to exhibit America's industrial history. Objects too big to display in the American History Museum will now take their place in the telling of one of our nation's great stories.

These are the best and worst of times for museums. They are attracting enormous public attention; they are broadening the range of what they do; they are groaning under the weight of expectations and resource shortfalls; they are stirring and complaining and aspiring and competing and sometimes ducking for cover. At the height of their popularity, they are wondering what they are.

I wouldn't have it any other way.

# Report of the Board of Regents

This year, the Board of Regents welcomed two new members, Representatives Ralph Regula and Robert T. Matsui, who filled vacancies created by the departures of Representatives Bob Livingston and Esteban E. Torres. At year's end, Louis V. Gerstner Jr. resigned from the Board of Regents. Regents Barber B. Conable Jr., Hanna H. Gray, and Wesley S. Williams Jr. were appointed for successive statutory terms.

At the Regents' January 25, 1999, meeting, Secretary I. Michael Heyman announced his decision to retire at the end of the year. A Search Committee was formed under the cochairmanship of Howard H. Baker Jr. and Wesley Williams, with Hanna Gray, Barber Conable, Anne d'Harnoncourt, and Manuel L. Ibáñez. Smithsonian National Board Chair Frank A. Weil served in a nonvoting capacity. During the winter and early spring, the committee advertised the position widely, sought nominations through extensive correspondence and personal contacts, and consulted with staff and trusted advisers. At the May 10, 1999, meeting of the board, the committee discussed with the Regents a proposed list of qualities to be sought in an 11th Secretary and presented the leading possibilities among a group of 250 names. At the September 13, 1999, Regents' meeting, after some 13 interviews and exhaustive reference checks, the committee unanimously recommended Lawrence M. Small, president and chief operating officer of Fannie Mae, electing him to serve as Secretary effective January 23, 2000.

With assistance from the Secretary and their ad hoc Committee on Facilities, chaired by Wesley Williams, the Regents approved the Smithsonian's acquisition of property near the Old Patent Office Building. The site selected, the Victor Building, will house the programs and offices currently encroaching on public space in the Patent Office Building. It will also allow the Institution to relocate most offices from leased space. The Victor Building appears to offer the Smithsonian space at a significant savings over the long term. The Secretary and his staff will be raising funds to make this acquisition affordable.

The Board of Regents authorized the establishment of Smithsonian Business Ventures. Pursuant to the recommendations of the Regents' ad hoc Committee on Business chaired by Senator Baker, Smithsonian Business Ventures is a separate entity under the direction of its board and chief executive officer and the oversight of the Secretary and the Regents. Robert W. Fri, Thomas M. Kenney, Constance Berry Newman, M. Ronald Ruskin, Robert J. Thomas, and Anthony Welters were appointed by the Regents to the Business Ventures Board, and Chief Executive Officer Gary M. Beer serves as an ex officio member.

The Regents consulted with the Secretary throughout the year on progress toward a major national fund-raising campaign. It was particularly gratifying to see the Smithsonian National Board's Campaign Committee contributing to this year's substantial progress. During the course of the year, the Regents approved budget requests for fiscal years 2000 and 2001 and established the following endowment funds: the Edna F. Blum Endowment for general purposes of the Institution; the Krieg Drawings and Prints Endowment at the Cooper-Hewitt, National Design Museum; the Karl Hagan Fund for the National Air and Space Museum; and the National Zoo Endowment.

The Regents were pleased to confer on Professor Ikuo Hirayama membership in the Order of James Smithson in recognition of his outstanding contributions to the Freer Gallery of Art. The Regents also voted to present Samuel P. Langley Medals to Apollo 11 astronauts Neil Armstrong, Edwin "Buzz" Aldrin, and Michael Collins in commemoration of their pioneering mission to the Moon.

Much of the Regents' work between meetings was accomplished by their standing committees, including the Executive Committee, the Nominating Committee, the Audit and Review Committee, the Investment Policy Committee, and the Personnel Committee. As the year drew to a close, the Regents considered the complexities of the Smithsonian's financial management and decided to establish a new ad hoc

Committee on Financial Affairs to recommend to the board the appropriate roles and responsibilities of a standing committee on finance.

The Regents established a National Board for the Smithsonian Center for Latino Initiatives and an Advisory Council of the Center for Folklife and Cultural Heritage. They expanded the Board of Trustees of the Hirshhorn Museum and Sculpture Garden as authorized by the Omnibus Appropriations Act for fiscal year 1999. The Regents were mindful of the diligence of many Smithsonian advisory boards. In recognition of the importance of these contributions, the Regents made the following appointments and reappointments: Siddharth Bhansali, Elizabeth Moynihan, and Michael Sonnenreich to the Visiting Committee of the Arthur M. Sackler Gallery; Elizabeth Ernst Meyer and Frank Pearl to the Visiting Committee of the Freer Gallery of Art; Elliot Lawrence, Brian S. Leyden, and Frieda Rosenthal to the Commission of the National Museum of African Art; Jorge Batista, William Drenttel, Joanne duPont Foster, Elaine La Roche, Jeffrey T. Leeds, Nancy Marks, Kenneth Miller, and Arthur Ross to the Board of Trustees of the Cooper-Hewitt, National Design Museum; Bernadette Berger, Ann Cousins, Ruth Sulzberger Holmberg, Jesús Moroles, David M. Silfen, and Carole Slavin to the Commission of the National Museum of American Art; Anne B. Baddour, Eugene A. Cernan, Frank A. Daniels Jr., Stanley Hiller, Thomas G. Pownall, Allen E. Puckett, Richard T. Schlosberg III, and Patty Wagstaff to the National Air and Space Museum's Dulles Center National Board; Paul K. Dayton, Henry L. Diamond, Charles McC. Mathias, and William R. Sweeney Jr. to the Smithsonian Environmental Research Center Advisory Board; Jane Beck, Pat Jasper, Barbara Kirshenblatt-Gimblett, Bernice Johnson Reagon, Gilbert Sprauve, Jack Tchen, and Ricardo Trimillos to the Advisory Council of the Center for Folklife and Cultural Heritage; Anita DeFrantz, David M. Fields, and Donald Lubin to the National Museum of American History Board; Paula Apsell, Isabella Cunningham, Thomas Eisner, William Ellis, James McClure, Robin Martin, James Patton, Desiree Rogers, and Howard Williams to the National Museum of Natural History Board; Susan Hager, Michael Hayman, Norman Mineta, Beth Stevens, Richard Thornell, and Kathleen Wagner to the Smithsonian Environmental Research Center Advisory Board; Richard E. Gray, John B. Henry, and Margery F. Masinter to the Smithsonian Institution Libraries Board; Eloise Cobell, Vine Deloria, Peter Johnson, Loretta Kaufman, Henrietta Mann, and Ofelia Zepeda to the Board of Trustees of the National Museum of the American Indian; Wilson Hulme II, Myron Kaller, Barbara R. Mueller, Betsy Towle, and Irwin Weinberg to the Council of Philatelists of

the National Postal Museum; Rudy Beserra, Gilberto Cardenas, Jesús Chavarría, Miriam Cruz, Roberto Cruz, Olga García, Sandra Guzman, Gema Hernández, Abel López, Mónica Lozano, Edward James Olmos, H. R. Bert Peña, Ricardo Romo, Esteban E. Torres, Carlos Tortolero, Joseph Wiscovitch, Raul Yzaguirre, Fernando Zazueta, and Teresa Zubizarreta to the Smithsonian National Board for Latino Initiatives; and Laura Lee Blanton, L. H. "Hacker" Caldwell, Frank A. Daniels Jr., Fredric C. Hamilton, Norman Y. Mineta, Henry R. Muñoz III, Nancy Brown Negley, Mary Ourisman, James Patton, Thomas F. Pyle Jr., Eric de Rothschild, A. R. Sanchez, and Jackson Tai to the Smithsonian National Board.

## Staff Milestones

The Smithsonian suffered a huge loss this year with the death of Donald D. Engen from a tragic accident in his sail plane over Nevada in July. In three short years, Engen became a much loved and admired director of the National Air and Space Museum, the capstone to his marvelous career in naval aviation, air safety, and the Federal Aviation Administration. His most memorable contribution, his passion for and advancement of the Dulles Center, will long be remembered. Thankfully, Deputy Director Donald S. Lopez again stepped in as acting director of the museum.

The Institution proudly welcomed Gary M. Beer to the new position of chief executive officer of Smithsonian Business Ventures. Beer brings vast experience to the challenges of ensuring that this new organization succeeds to the benefit of the entire Institution. Edward Knapp was recruited as the new comptroller, George Van Dyke was tapped to be chief of information technology operations, and Peter Cannell was appointed director of the Smithsonian Institution Press.

The Secretary's Gold Medal for Exceptional Service was presented to Irwin Shapiro for his outstanding work at the Smithsonian Astrophysical Observatory and to Derrick Ross for his outstanding work at the Office of Physical Plant. Both received their medals from the Secretary on June 15, 1999, at the Smithsonian's first Day of Excellence celebration.

The ongoing contributions of countless additional employees and volunteers deserve recognition as well. Public servants—from custodians to curators, astrophysicists to accountants, and engineers to public information officers—are the real backbone of the Smithsonian. As the Institution prepares for the new millennium, all Smithsonian supporters have reason to be grateful to this cadre who will chart its course and determine its destiny.



# Report of the Provost

J. Dennis O'Connor

## Extending the Smithsonian's Reach

Each year, the reports from the Smithsonian's museums and research institutes present an evolving portrait of an Institution dedicated to its traditional mission—the increase and diffusion of knowledge—and committed to engaging and serving a broad audience. Those complementary emphases are especially apparent this year. On the one hand, the Smithsonian's fundamental activities—research, education, and stewardship of the national collections—seem more impressive than ever in their scope and substance. On the other hand, the Institution is actively looking for ways to broaden access to its extraordinary resources and intensify its already significant presence in the worlds of the sciences, art, and the humanities. As the Smithsonian maintains a focus on excellence in activities of collection and research, we are simultaneously turning outward, seeking greater public engagement in all that we have to offer.

From the Smithsonian's base in Washington, to a barrier reef in the Caribbean, to the far reaches of the cosmos, the Institution's cutting-edge research continues to break new ground. So, too, does our commitment to make research resources and research findings widely available. Here in Washington, the Smithsonian has acquired the Victor Building, which will be home to staff offices for the National Museum of American Art, the National Portrait Gallery, and the Archives of American Art, as well as a planned Center for American Art. This major research facility will welcome scholars and the interested public who want to study research materials and curatorial records related to the history of American art. On Carrie Bow Cay in Belize, the National Museum of Natural History this year dedicated its rebuilt field station, which is considered one of the world's leading facilities for the study of coral reefs. Research from this remote one-acre island contributes to our understanding of the diverse and fragile barrier reef ecosys-

tem, and ultimately to its preservation. The images of cosmic phenomena now being returned from the powerful Chandra X-ray Observatory are amazing even to scientists at the Smithsonian Astrophysical Observatory, home of Chandra's flight operations control center. Anyone with Internet access can examine a changing selection of these images on the project's Web site, accessible from the Smithsonian's home page.

There is no question that electronic access is revolutionizing the way the Smithsonian does business. By sharing resources through the Web or cable networks, we are extending our service in ways that were unimaginable only a few years ago. The online publication of digital editions of rare books, for instance, brings illustrated volumes from the Smithsonian Institution Libraries' collection to a worldwide audience while reducing the handling of fragile materials. The Libraries' Web site is a fast-growing "electronic library" that attracts everyone from curious youngsters to advanced scholars. Elsewhere in the Institution, electronic education initiatives are helping us reach more students and teachers than ever. As an example, this year students in more than 6,500 middle schools participated via cable broadcast in a program on the African American inventor Lewis Latimer, developed by the Jerome and Dorothy Lemelson Center for the Study of Invention and Innovation at the National Museum of American History.

The Smithsonian's capacity for research and public education is linked to stewardship of the national collections, which require effective management, careful preservation, and continued development. This year, for example, the Star-Spangled Banner Preservation Project in the National Museum of American History invited the public to observe and learn about the complex conservation of this national icon, while every Smithsonian museum added objects to their collections, opening exciting possibilities for research, exhibitions, and education.

Across the Institution, there are many more examples of an outward focus. The Smithsonian Affiliations Program has initiated innovative collaborations with museums in communities around the country, sharing both objects and expertise. Through a variety of activities, we are dedicated to making the art, history, and culture of Latino, Asian Pacific American, and African American communities an integral part of the Institution. And the Smithsonian Institution Traveling Exhibition Service continues its 47-year tradition of taking the Smithsonian on the road to every state.

If the reports on the following pages leave a collective impression, it is that the boundaries that once defined the Institution are disappearing. Americans who once knew us best as buildings on the National Mall can now add another dimension to their direct experience with museum objects and exhibitions. They can see Smithsonian artifacts in their hometown museums, browse our Web site for virtual exhibitions and nuggets of information, or take electronic field trips without leaving their classrooms. Research by Smithsonian scientists contributes to major advances in nearly every discipline, including medicine, marine biology, and the conservation of endangered species. With fewer limitations of place and time, we have extraordinary potential to extend the boundaries of knowledge, while at the same time reaching out to engage more and more people in what the Smithsonian offers.

### *An Anniversary Acquisition for the Hirshhorn*

Acquired and installed in summer 1999, *Are Years What?* (for Marianne Moore), 1967, a monumental steel sculpture by American artist Mark di Suvero (b. 1933), rises dramatically some 40 feet from a street-level section of the Hirshhorn Museum's Sculpture Garden. This 10-ton composition of industrial I-beams—with a suspended, moving V element—epitomizes di Suvero's gift for communicating human fragility in intractable, industrial materials. The title refers to a short poem celebrating life, by the American writer Marianne Moore (1887–1972).

*Are Years What?* (for Marianne Moore), considered one of the artist's greatest works, strengthens the Hirshhorn's impressive collection of monumental sculptures and was a fitting addition to the collection as the museum celebrated its 25th anniversary in 1999. Consistently included in retrospectives of di Suvero's work, it was most recently seen in a citywide installation in Paris in 1997.

The sculpture was acquired in part through the Joseph H. Hirshhorn Purchase Fund and in part as a gift of the Institute of Scrap Recycling Industries, by exchange.

### *Visibility for American Art*

The National Museum of American Art may be closed officially for a three-year renovation beginning in January 2000, but a program of major national touring exhibitions will keep the museum, and American art, very much in the public eye. This year, the museum concluded an arrangement with The Principal Financial Group for a marketing spon-

sorship worth \$3.75 million. The campaign is timed to coincide with "Treasures to Go," eight thematic exhibitions of masterworks from the museum's collections that will tour the country during the renovation of the Old Patent Office Building. Public relations and marketing initiatives will include advertising, media appearances, cable television programs, special events, and travel to the cities hosting the exhibitions.

The paintings and sculptures in "Treasures to Go" cover eight themes from the eighteenth century through the present: Young America, Lure of the West, American Impressionism, The Gilded Age, Scenes of American Life, Modernism and Abstraction, Contemporary Folk Art, and Arte Latino. The exhibitions are traveling to more than 70 museums.

The Principal Financial Group began supporting the arts in the 1930s to promote cultural awareness, reach diverse audiences, and foster creative thinking among employees through participation in the arts.

### *Preservation on Display*

In a custom-designed laboratory at the National Museum of American History, a team of conservators is engaged in the painstaking process of saving the Star-Spangled Banner. But this is no ordinary object and no ordinary museum preservation project. While conservators work from a mobile platform six inches above the flag, visitors watch intently through a floor-to-ceiling glass wall. An interactive exhibition, "Preserving the Star-Spangled Banner: The Flag that Inspired the National Anthem," explains the flag's history and describes the treatment process. As the museum stabilizes the condition of this national icon—damaged by time and exposure to the elements—visitors are learning about a fascinating process that usually goes on behind the scenes.

Designing a conservation facility suitable for the 1,020-square-foot banner presented unusual challenges. The flag rests on a large table, with the work platform spanning its width. Low-level ambient lighting and a specially designed heating, ventilation, and air-conditioning system protect the flag from harmful ultraviolet light, contaminants, and temperature and humidity fluctuations.

During the treatment phase of the project, conservators will carefully vacuum the flag and then clean it using chemical solvents and detergents. Stitch by stitch, they will remove a linen lining added in 1914. A new support will stabilize the flag when it is returned to exhibition in 2002.

The Star-Spangled Banner Preservation Project is made possible with major support of \$10 million from Polo Ralph Lauren. Generous support and significant leadership are also provided by The Pew Charitable Trusts, the U.S. Congress, the White House Millennium Council, the John S. and James L. Knight Foundation, and Save America's Treasures at the National Trust for Historic Preservation.

At the end of the fiscal year, the museum was preparing to launch a special feature on its Web site devoted to the Star-Spangled Banner and the preservation project (<http://americanhistory.si.edu/ssb/>). A book by museum his-

torian Lonn Taylor, based on research carried out as part of the project, will be published by the museum and Harry N. Abrams, Inc., in the spring of 2000.

### Galapagos *Behind the Scenes*

A Smithsonian marine biologist's scientific explorations, undersea and on land, are revealed in realistic detail in *Galapagos*, a spectacular 3D IMAX® film produced for the National Museum of Natural History's new Johnson Theater. The 40-minute film follows Carole Baldwin on her first research trip to the Galapagos Islands, the isolated, geologically young archipelago 600 miles west of South America on the equator, studied by Charles Darwin in the 1830s. Baldwin is the human lead in the film, but she shares the screen with a cast of blue-footed boobies, sea lions, moray eels, hammerhead sharks, and other wild residents of this Ecuadorian national park.

Galapagos wildlife are unusually tame, and Baldwin frequently found herself inches away from creatures that live nowhere else on Earth, among them giant tortoises and marine iguanas. The highlight of the expedition was diving at depths of up to 3,000 feet in the Johnson Sea-Link submersible. Many of the species collected on the expedition came from the little-explored realm between 400 and 1,000 feet. Batfish that stride across the ocean bottom on leglike fins, viper fish equipped with formidably long fangs, and other odd creatures were brought back for the museum's preserved fish collection, the largest in the world.

While *Galapagos* tours IMAX® theaters around the world, Baldwin will be working at the museum to describe several new species collected in the islands, including a new kind of cat shark and a new sea bass. She will also be identifying scores of larval fish—one of her research interests—brought back from the expedition.

The museum's partners in the *Galapagos* project were Imax Corp., the National Science Foundation, and Mandalay Media Arts. America Online is sponsoring the film's international tour. Discovery Communications, Inc., is the principal sponsor of the 80,000-square-foot, \$40.6 million Discovery Center, which houses the Johnson Theater, a café, and a museum shop.

### "Posted Aboard RMS *Titanic*"

The drama of the sinking of the RMS *Titanic* played out over just a few hours, yet this tragic event has captivated our imaginations for decades. What few realize is that the *Titanic* was more than the largest and most luxurious vessel of her time. She also was an "RMS"—a Royal Mail Ship. Using artifacts recovered at sea nearly nine decades ago, "Posted Aboard RMS *Titanic*," an exhibition at the National Postal Museum, examines the tragedy from this previously overlooked perspective.

The sinking of the *Titanic* cost the lives of five valiant postal workers who struggled in vain to save the mailbags in the ship's final hours. American sea post clerks John Starr March, Oscar Scott Woody, and William Logan Gwinn, along with their two British colleagues, postal workers James Bertram Williamson and John Richard Jago Smith, were last seen by Albert Thessinger, a steward aboard the *Titanic* who survived the sinking. Thessinger was briefly pressed into service to help the five clerks move mailbags, but he gave up on this seemingly suicidal task when the water in the mailroom rose to waist height. Thessinger later recalled, "I urged them to leave their work. They shook their heads and continued at their work." Despite the clerks' valiant effort, none of the mail was saved. Video film footage shown in the exhibition reveals that the mailbags remain within the sunken liner.

"Posted Aboard RMS *Titanic*," which opened on September 17, 1999, and continues until June 12, 2000, was made possible by generous gifts from Dr. Jeanette Cantrell Rudy, the James E. Pehta Foundation, the Atlantic Envelope Company, the American Postal Workers Union, the AFL-CIO, and the National Grange of the Order of Patrons of Husbandry.

### *An Earth-Bound Innovation from SAO*

The development of low-field magnetic resonance imaging (MRI) by Smithsonian Astrophysical Observatory (SAO) scientists was cited by the American Institute of Physics as one of the outstanding developments in physics in 1998. A typical MRI device uses a huge, high-field magnet to polarize hydrogen nuclei inside water molecules in the human body. The spinning molecules produce radio signals that can image most organs in great detail—to detect tumors, for example. SAO researchers use lasers to increase the nuclear spin-polarization of inert gases like helium, enabling MRI of the inhaled gas in the lung, the sinuses, and other body cavities where MRI has been ineffective. This new biomedical imaging technique, a spin-off of research in atomic physics, is only about five years old. Already, doctors are using laser-polarized gas MRI to diagnose and plan treatment for people with lung diseases, such as emphysema and asthma.

The SAO innovation, developed in cooperation with the Massachusetts General Hospital, uses small, low-field magnets for MRI of laser-polarized gas. It promises much simpler, less intimidating, and lower-cost MRI units in hospital settings, as well as portable instruments that can be used in remote, cramped environments, such as space vehicles. Recently, SAO scientists have begun to apply laser-polarized gas MRI in other fields, such as probing the porous structure of rocks that may hold oil, natural gas, and subterranean water. These innovations demonstrate the vital synergy between basic science and practical applications, and the important role SAO plays in making these connections.

# Reports of the Museums and Research Institutes

## Office of the Provost

*J. Dennis O'Connor, Provost*

The Provost serves as the Smithsonian's chief programs officer, providing leadership and integrated oversight for all of the Institution's program activities carried out in the museums, research institutes, and education and scholarly service units. The Provost reviews and evaluates the management of programs in research, exhibitions, and education outreach in the sciences, arts, and humanities; provides operational facilitation to the program units; maintains close working relationships with directors and their boards and commissions; and assists the units in undertaking collaborative initiatives.

The Accessibility Program collaborates with all Smithsonian organizations to ensure that current and planned programs, exhibitions, and facilities are fully accessible to staff and visitors with disabilities. The Scientific Diving Program oversees all diving activities conducted under the auspices of the Institution, including establishing safety standards and providing training and certification.

The Institutional Studies Office produces analyses of internal Smithsonian data, and conducts studies of visitors, exhibitions, and activities for administrators, curators, and program staff. Important secondary products are long-term databases and an increasing body of scientific knowledge about Smithsonian visitors and their experiences.

The Provost is responsible for managing the new Affiliations Program, which enables qualified museums across the country to receive long-term loans of Smithsonian collections. He oversees the Institute for Conservation Biology which was established to improve coordination among the Institution's existing conservation biology programs, enhance their effectiveness, and increase efforts to obtain private and government funding for related research. The

Office is also responsible for coordinating and facilitating Latino and Asian Pacific American initiatives.

## Anacostia Museum and Center for African American History and Culture

*Steven Cameron Newsome, Director*

It was the Year of Spirituality for the Anacostia Museum and Center for African American History and Culture. To explore the rich African American tradition of worship, praise, and keeping faith at the center of life and community, in-house historians and curators created exhibitions, workshops, lectures, and a series of music, dance, and theater performances.

Building on the momentum created by the exhibition "Speak to My Heart: Communities of Faith and Contemporary African American Life," the museum produced and released its first compact disc recording, *Praise the Lord! Gospel Music in Washington, D.C.* Project coordinators selected eight vocal ensembles and 15 songs to display the creative and spiritual continuity that runs from traditional hymns through the rousing rhythm and blues now standard in contemporary gospel. *Billboard* magazine called the Smithsonian Folkways release "indispensable to aficionados and a perfect starting place for anyone just discovering the rich heritage of gospel music."

With the exhibition "Locating the Spirit: Religion and Spirituality in African American Art," the museum showed how art gives a clear voice to complex and personal expressions of faith. Curator Deborah Willis assembled some 115 paintings, photographs, sculptures, and textile pieces to spotlight the impact of more than 70 African American artists, including Henry Ossawa Tanner, William H. John-

son, Sister Gertrude Morgan, Romare Bearden, Chester Higgins Jr., and David C. Driskell.

"Locating the Spirit" inspired and served as the backdrop for the 10th annual James A. Porter Colloquium on African American Art and Spirituality. The museum collaborated with the Howard University Department of Art to bring 700 participants to a three-day symposium featuring lecture-demonstrations by some of the nation's major artists and art scholars. Among the presenters were 20 artists whose work was exhibited in "Locating the Spirit." Named for James A. Porter (1905–70), a former chair of the Howard art department who produced the nation's first in-depth scholarship in African American art history, the Porter Colloquium is now an annual feature of the museum's educational programming.

The museum also made a deeper and more intense examination of the art and cultural issues of Africa. In its first collaboration with the John F. Kennedy Center for the Performing Arts, the museum organized an exhibition distilling more than a century's worth of photographs taken by artists born and based in Africa. "Revue Noire: Africa by Africans" explored diverse esthetics and techniques from a wide range of places and photographers, created a fresh view of the African family, and presented studio portraiture rarely seen in the United States.

In a first-time collaboration with the National Museum of African Art, the Anacostia Museum and Center helped present "Wrapped in Pride: Ghanaian Kente and African American Identity." For its part of the two-sited exhibition, the museum examined how Africa's most popular textile art has become a vital part of contemporary life in America, used in worship services, formal ceremonies, and home decor.

February's Black History Month observances got an unusual launch as a crowd of about 16,000 turned out for the debut of the Capital Children's Carnival. With a challenging Black History Month Quiz as the centerpiece—featuring the D.C. delegate to the House of Representatives Eleanor Holmes Norton as quiz master—the day's events included hands-on arts and crafts, storytelling, folk dancing from Africa, the Caribbean, and South America, and a carnival parade with participants wearing the masks and costumes they made that day.

## Archives of American Art

*Richard J. Wattenmaker, Director*

The Archives of American Art (AAA) is the world's largest repository of primary source documentation about the history of visual arts and culture in America. For more than 45 years, the Archives has collected, preserved, and made available for study such diverse materials as letters and diaries of artists and crafts people; manuscripts of critics and scholars; records of art museums, galleries, and schools; photographs; works of art on paper; and recorded oral and video interviews. More than 14 million documents comprise an indispensable resource for researchers, who, in addition to

consulting original papers at the Washington, D.C. headquarters, may access selected holdings on microfilm worldwide through interlibrary loan or at Archives centers in Washington, New York, and San Marino, California, and affiliated research facilities in Boston and San Francisco. The Archives also provides Internet access to its resources and services through its Web site and on-line catalog.

The Archives of American Art collects, preserves, and makes available for study the records, original papers, photographs, diaries, and oral history interviews of artists, crafts persons, collectors, dealers, critics, museums, and other arts institutions. In FY 1999, AAA continued to meet its goal of increasing accessibility to the collections through a variety of means, including the processing of papers, the publication of finding aids, the display of original documents in exhibitions, Web site enhancement, and other forms of outreach.

Because of the ongoing renovation of the Patent Office Building, AAA relocated its Washington offices to The Aerospace Center, one block from the National Mall. Large, climate-controlled processing rooms facilitate the processing of archival documents. The consolidation of Interlibrary Loan with the rest of Reference Services has enhanced services to researchers worldwide.

## Research

In FY 1999, AAA continued to employ technology to increase access for its Internet users. Among the enhancements was "A Preliminary Guide to Resources on Asian American Artists at the Archives of American Art." The guide, presented in conjunction with Asian Pacific American Heritage Month, provides documents and photographs on-line. A published guide comparable to those already published by the Archives for the papers of African American and Latino artists is in preparation.

The Archives is currently engaged in a pilot project employing encoded archival description (EAD) to encode 50 of its finding aids. EAD is a digital format that will make the finding aids accessible to researchers worldwide on the Web. A researcher can search encoded finding aids individually or in combination with the growing number of similarly encoded finding aids contributed by other archival repositories throughout the world. Once encoded in EAD, the finding aids will be contributed to the Research Libraries Group (RLG) Archival Resources, providing even greater accessibility to the Archives' rich holdings.

## Collections Acquisitions

In FY 1999, the Archives made significant additions to its holdings of over 14 million documents. Among these was the final installment of the papers of Marcel Breuer (1902–1981), comprising financial records and personal and professional correspondence with his colleagues from the Bauhaus, including Walter Gropius, Herbert Bayer, and Josef Albers. AAA also acquired the complete records of the Byron Gallery, 1960–1971, which specialized in Surrealist masters (Ernst, Matta, Magritte) and younger Pop,

Op, Conceptual, and Minimal artists. Other new acquisitions include the Thomas Craven (1919–1975) papers, the papers of New England artist Marion Huse (1896–1967), an addition to the John Steuart Curry (1897–1946) papers, the Stephen Etnier (1903–1984) papers, the Gifford Beal (1879–1956) papers, and the papers of Mildred Baker (1905–1999), which document her work on the Federal Art Project from 1935 to 1943. Also in FY 1999, AAA collected the Kate Steinitz (1889–1975) papers, additions to the Beatrice Wood (1893–1998) papers, and papers of Abbott Handerson Thayer (1849–1921), who corresponded with numerous contemporaries, including Samuel Clemens, Daniel Chester French, William James, N.C. Wyeth, and others. Also noteworthy were the latest additions to the Philip Pearlstein (b. 1924) papers from 1991 to 1996, as well as the latest installment of the Robert Rosenblum (b. 1927) papers.

Funds from the then Institution-wide program for Latino programming enabled the Archives to complete its Puerto Rican Art Documentation Project, including a comprehensive survey of art-related material in Puerto Rico and a survey of Puerto Rican art-related primary source material in New York City. Also funded by the Latino Pool Allocation was the Cuban-American Oral History Interview Project, which funded the transcribing and final editing phase of oral history interviews of ten prominent Cuban-American artists in Miami. The transcripts were made available on-line through the Archives' Web site in October 1999. Funding also supported the Chicano Art Documentation Project, with oral histories being conducted with artists in San Francisco and Los Angeles. Also under way is the publication of a revised, expanded research guide to the papers of Latino and Latin American artists in the Archives.

### Collections Management

AAA made significant progress in its goal to increase accessibility to collections with several processing projects. Among these were the papers of Cuban art historian Giulio V. Blanc (d. 1995), dating from 1923 to 1995, which are particularly valuable for the extensive artists files of both major and lesser known contemporary Cuban artists. The Archives also processed the records of the American Federation of Arts, dating from AFA's founding in 1909 through 1993. The collection is particularly valuable for its documentation of twentieth-century American art history and the wealth of information about the numerous programs and exhibitions supported and implemented by the AFA to promote the study of contemporary American art. AAA is publishing a finding aid to this collection, as well as a finding aid to the Downtown Gallery papers, which the Archives has recently processed and microfilmed. The Downtown Gallery specialized in contemporary American art as well as pioneering in the field of American folk art, and its founder, Edith Halpert (1900–1970), was deeply involved in fostering the efforts of African American artists to gain recognition of their work.

### Publications and Outreach

The Archives of American Art *Journal* publishes scholarly articles showcasing AAA's collections, as well as book reviews and reports on recent important acquisitions. In FY 1999, AAA presented the exhibit "In Sight: Portraits of Folk Artists by Chuck Rosenak." The show, comprised of photographs and selected documents from the folk art collectors Chuck and Jan Rosenak, included objects from the Smithsonian American Art Museum's Rosenak Collection that complemented the Archives' documents. The Rosenaks had previously donated to the Archives their extensive research files, including letters, more than a thousand photographs of folk artists, printed material, and tape-recorded interviews. "In Sight" afforded an excellent opportunity for the Archives to reach a broad audience of folk art aficionados and to make contacts that may lead to acquisitions of additional papers. An on-line version of the show is found on the Archives Web site. The Archives also presented the exhibit "Eyre de Lanux: Designs of a Muse," chronicling the life and works of little-known American artist Eyre de Lanux (1894–1996), whose papers span 80 years and highlight her friendships with Picasso, Brancusi, and Louis Aragon.

The Archives manages an active program of outgoing loans to museums and other scholarly institutions, and continues its tradition of providing educational opportunities to an ethnically diverse population through internships and fellowships.

### Non-appropriated Resources

Trust funds provide partial support for Archives operations as well as financing a variety of projects and programs. In FY 1999, grants from The Henry Luce Foundation, Inc., and the Getty Grant Program enabled AAA to fund the processing of several major collections. Throughout the year, donors made numerous gifts toward the matching of a \$500,000 challenge grant from The Brown Foundation, Inc., to endow Archives' publications. Among these was a \$100,000 gift from The Beinecke Foundation, Inc., and a gift totaling \$50,000 from Agnes Gund, former President of the Board of the Museum of Modern Art, New York, which will also be used to support Archives' operations. In addition, the Archives received a gift of \$12,000 from the Gerta Charitable Trust for the processing, microfilming, and publication of a finding aid to the Marcel Breuer papers.

### Freer Gallery of Art and Arthur M. Sackler Gallery

#### *Milo C. Beach, Director*

With the organization and presentation of the splendid exhibition "Devi: The Great Goddess" at the Arthur M. Sackler Gallery, the galleries concluded two years of anniversary celebrations—the Sackler Gallery's 10th in 1997 and the 75th

anniversary of the Freer Gallery of Art, which began in 1998 and concluded this year.

In 1996 the galleries could not have predicted the benefits that would emerge from these observances. The anniversaries and accompanying publicity brought unprecedented and continuing public attention to the galleries. Increased notices attracted new circles of visitors, scholars, friends, and supporters. Now acknowledged together as the national museum of Asian art, the Freer and Sackler galleries with their separate yet complementary collections are increasingly known and appreciated as an exceptional international resource for scholarship, publication, and exhibition.

Recognition also took the form of magnificent gifts of art. The Dr. Paul Singer Collection of Chinese Art of the Arthur M. Sackler Gallery, Smithsonian Institution, was a joint gift of the Arthur M. Sackler Foundation, Paul Singer, the AMS Foundation for Arts, Sciences, and Humanities, and the Children of Arthur M. Sackler. The collection includes some 5,000 works—in jade, bronze, ceramic, ivory, wood and other materials—dating from the fourth millennium B.C. to the twentieth century.

Of particular interest is a group of objects that Dr. Singer assembled from the state of Chu in southern China. Archaeological discoveries have given the formerly obscure Chu culture new status as one of the most exciting research topics in the field of ancient Chinese art history. Thomas Lawton, director emeritus, is spearheading the effort to publish and exhibit this extraordinary collection.

Three important awards brought recognition to friends of the galleries this year. Ikuo Hirayama, president of the Japan Art Institute, Tokyo, was inducted into the Order of James Smithson for his contributions totaling \$11 million to the Freer and Sackler galleries. The Order of James Smithson is the highest honor the Smithsonian Institution can bestow. Professor Hirayama's induction ceremony was capped by announcement of his gift of \$2.5 million to fund a major program for the care of Japanese painting in the galleries' department of conservation and scientific research.

The second award, the Charles Lang Freer Medal, was presented to Sherman Lee for his lifelong commitment to connoisseurship. Dr. Lee has enriched the studies in a wide range of artistic traditions in Asian countries: Buddhist art, Chinese painting, and the arts of Japan, India, Southeast Asia, and the Himalayan kingdoms, among others. The impact of his extensive publications has been augmented and broadened by frequent, often ground-breaking exhibitions and by a dazzling series of acquisitions he has made for various museums. Intended to honor a scholar of truly extraordinary distinction, the Freer Medal celebrates Dr. Lee's career and extraordinary achievements.

The third award, the biennial Shimada Prize for distinguished scholarship in the history of Asian art, was presented to the Japanese art historian Toshie Kihara, who is also an official of Japan's Agency for Cultural Affairs. Kihara was selected from a group of 21 nominees for her two-volume treatise on the Japanese painter Kanō Tan'yū (1602–1674), whom art historians regard as the most significant painter of the early Edo period (1615–1716). Kihara's

publication in Japanese—*Yūbi no tankyū: Kanō Tan'yū ron* (*The Search for Profound Delicacy: the Art Of Kanō Tany'yu*), (Osaka, Japan, Osaka Daigaku Shuppanki, 1998)—is the first critical scholarly work to interpret Tany'yu's major contributions to the history of art in Japan. The award carries a \$10,000 prize and is presented jointly by the Freer and Sackler galleries and the Metropolitan Center for Far Eastern Art in Kyoto, Japan, for the best research publication in the field.

## Development Activities

Support for the galleries acquisitions and programs has grown tremendously through our 300-member group, Friends of the Freer and Sackler Galleries. In fiscal year 1999 there was a 17 percent growth in membership, and approximately \$329,000 was raised from Friends memberships, an increase of 20 percent over fiscal year 1998. The galleries are grateful to the Friends for their immense generosity to the Friends Purchase Fund, which in 1999 enabled the museum to purchase two works of art at the April 17, 1999, annual dinner: *Bhairava*, a fifteenth–sixteenth century Nepalese gilt copper repoussé sculpture and *The Five Sacred Festivals*, a set of hanging scrolls by Ikeda Koson, painted in ink and color on silk, ca. 1830. Additionally, special contributions to the fund from members and participants on the Friends spring trip to Iran added a third object to the permanent collections: a blue-and-white ceramic plate, which is from the Timurid dynasty (ca. second half of the fifteenth century) and associated with the city of Nishapur in northeastern Iran.

## Exhibitions

Anniversary festivities came to a festive climax with the six-month run of the exhibition and associated activities for “Devi: The Great Goddess,” March 28–September 6, 1999. Devi, as she is commonly known in South Asia, is among the three most important deities of Hinduism, and yet this year's exhibition was the first major museum exploration of her role and her many manifestations. Complementing the galleries' strong holdings in Indian paintings, the works borrowed for this exhibition from collections in Europe and the United States included a wealth of sculpture. Images of the goddess came from many regions of South Asia and richly represented the diversity of her forms and identities.

Several other Sackler exhibitions this year offered richly varied stylistic and thematic interpretations of the land, peoples, and monuments of South Asia. Visitors had opportunities to compare the work by both indigenous artists and foreigners recording their impressions of the land. One exhibition, “The Jesuits and the Grand Mughal: Renaissance Art at the Imperial Court of India 1580–1630,” September 27, 1998–April 4, 1999, for example, examined the enduring effects of cultural exchange between Jesuit missionaries from Europe and the Mughal emperors of northern India. Another small exhibition, April 25–July 18, 1999, focused on the work of a single Indian artist, Nainsukh of Guler (ca. 1710–1778). Because many of Nainsukh's paintings were created



for a single royal patron, the exhibition gave an absorbing look at life in one particular Rajput court.

"Yoshida Hiroshi: Japanese Prints of India and Southeast Asia," August 1–October 17, 1999, featured color woodblock images by the Japanese artist Yoshida based on his travels in 1930. Another exhibition, "Behind the Himalayas: Paintings of Mustang," presented 19 watercolors by the Australian architect Robert Powell showing the stunning architecture and desolate landscape of the region of Nepal known as Mustang.

Celebration of the 75th anniversary of the Freer Gallery culminated in a splendid dinner and preview of the exhibition "Beyond the Legacy: Anniversary Acquisitions for the Freer Gallery of Art" for donors and patrons on October 2, 1998.

The Freer anniversary exhibition presented the results of a four-year campaign to acquire works of Asian art, and it included more than 100 works selected from among many fine gifts and supported purchases. "Asia in Museums: New Perspectives," an international symposium to mark the anniversary, was made possible by a generous grant from the Ellen Bayard Weedon Foundation.

Complementing the anniversary show at the Freer were important presentations from the collection. These exhibitions brought attention to the work of directors and curators, past and present, in carefully enlarging the size and scope of the gallery's holdings over the past three quarters of a century.

For the first time since it was purchased for the Freer in 1931, *A Breath of Spring*, the eight-and-a-half-meter-long Chinese handscroll dated 1360, was exhibited in its entirety. The scroll is among the most famous Chinese paintings in the Freer collection and the only known work by the Daoist recluse Zou Fulei. It has inspired poetry by distinguished writers from Yang Weizhen (1296–1370), considered one of the greatest poets of the Yuan dynasty, to the celebrated Canadian Michael Ondaatje, author of *The English Patient*. Yang wrote his poem directly on the scroll, which was joined by colophons, or commentaries, by other Chinese literati and a later owner.

"Whistler and the Hadens," including some of the artist's earliest etchings, was a small exhibition of American expatriate James McNeill Whistler's (1834–1903) prints and drawings. Whistler was regarded in his lifetime as the most accomplished etcher since Rembrandt and among the greatest printmakers in the history of Western art. The prints in this show were made during his initially friendly but ill-fated association with his brother-in-law, Francis Seymour Haden (1818–1910).

### Public Programs

While the galleries' staff planned many of this year's programs to complement the exhibition "Devi: The Great Goddess," it also offered performances, films, and demonstrations from a variety of cultures. The galleries' feature film offerings, for example, included our first surveys of the cinema from Vietnam and Turkey, plus a series of 11 recent

films of the Arab world. The third festival of Iranian films focused on the 30-year career of director Dariush Mehrjui, including his 1998 film, *The Pear Tree*. The fifth annual "Made in Hong Kong" series included eight Washington premieres and prompted a cover story and five-page spread on Hong Kong cinema in the "Weekend" section of the *Washington Post*. "Women in Indian Cinema," a program of 14 art films and documentaries featured the premiere of Prakash Jha's "Death Sentence." Finally, the Freer launched its first look at the globally popular genre of Japanese animation, including the Washington premiere of the blockbuster *Princess Mononoke*.

The Asian performing arts series focused on women in South Asia, with such prominent dancers as Mallika Sarabhai and Alarmel Valli; classical vocalists Abida Parveen and Veena Sahasrabudhe, and pop singer Najma.

The galleries' exploration of contemporary Asian music included Jason Hwang and the Far East Side Band from New York; the Japanese *shakubachi* (bamboo flute) artist Teruhisa Fukuda; and the Indian fusion ensemble, Facing East. To close the year, the galleries presented Shinto music, dance, and ritual from the Kasuga Taisha, one of Japan's oldest and most prestigious shrines in Nara.

ImaginAsia, the galleries' hands-on art education program for children and families, continued to draw enthusiastic crowds year-round, with even larger numbers in the summer, as late afternoon to early evening sessions were a hit with families during "Art Night on the Mall."

Experimentation marked many of this season's offerings, which included a new format of music and conversation by performers. Highlights were an appearance by cellist Yo-Yo Ma and composer Bright Sheng, who demonstrated and discussed the incorporation of folk and traditional Asian music into such contemporary works as Bright Sheng's new composition for solo cello. Another concert discussion featuring oud player Simon Shaheen, lutanist Ronn McFarlane, and *pipa* player Wu Man, centered on the evolution of their three related instruments in different societies along the Silk Road and in Europe.

Experimentation and tradition was also apparent in the Bill and Mary Meyer Concert Series this season. In "New Music from China," composer Zhou Long led two groups, Music from China and the New Music Consort, in a performance featuring the reconstruction of a composition discovered in the Buddhist caves at Dunhuang, China, and a performance of his own work, "Tales from the Cave." Sharing the program was "The Points," a prizewinning work by the prominent female composer Chen Yi. Other concerts included performances by Musicians from Marlboro I, II, and III; the Shanghai Quartet; Angela Hewitt, piano; Paul Neubauer, viola; and the Guilford Ensemble.

Gallery shop sales increased by 4 percent during 1999 to the highest level ever achieved. This success has been accomplished by providing merchandise that ties directly into our collections and exhibitions, providing outstanding customer service, advertising to broaden our market in conjunction with public affairs, and by sponsoring various gallery and product-related events. The gallery shops sponsored 10 read-



ings by authors of new books related to the galleries' collections. Among the writers was Michael Ondaatje, who read from *Handwriting*, his new book of poetry. These efforts resulted in the shops' important contribution to the cost of museum programs and acquisitions of art.

## Research

This year's scholarly investigations emphasized collaboration and preparation for the many exhibitions planned for the next few years. Kenneth Myers, assistant curator of American art in the Freer, and Martha Smith, the galleries' paper conservator, have continued the research connection between the Freer and the University of Glasgow, Scotland. The Freer and the university together house the world's largest collections of art, papers, correspondence, and memorabilia by or relating to James McNeill Whistler (1834–1903). Through a formalized "Scheme of Association," the institutions promote and support scholarly research about Whistler and his period. The project is centered in Glasgow and overseen by Nigel Thorpe, director of the Center for Whistler Studies at the university.

With a wealth of Chinese objects coming to the galleries as gifts and purchases during the recent anniversary observances and several important exhibitions in the planning stages, there is much activity among the galleries' scholars of Chinese art. Jenny So, curator of ancient Chinese art, is working on an important research volume about the jades in the collections of the Freer and Sackler. Joseph Chang, associate curator, is preparing a catalogue of the Freer collection of Chinese painting and calligraphy from the Song and Yuan dynasties. Both catalogues have received multiyear support from the E. Rhodes and Leona B. Carpenter Foundation. Dr. Chang is writing two additional exhibition catalogues, the first on later Chinese calligraphy from the gift of Robert H. Ellsworth, and a second on the painting and calligraphy of Bada Shanren. Stephen D. Allee is translating poetry and prose texts for Dr. Chang's publications and also working on a book to introduce children to Chinese painting. Jan Stuart, assistant curator, received a grant from the Smithsonian's Collections-Based Research Program for research for her forthcoming exhibition, "Worshiping the Ancestors: Chinese Commemorative Portraits in Late Imperial China." Preparation for the exhibition also took her to Korea and China under a grant from the Smithsonian's Research Opportunities Fund.

Louise A. Cort, curator for ceramics, is working on a catalogue of the Freer's collection of Japanese ceramics from Kyoto and Kyushu and collaborating with Jan Stuart on a publication about the Freer's Chinese celadons. She is continuing her annotated translation of the diary of Japanese potter Morita Kyuemon and working on a book about India entitled *Temple Potters Of Puri*.

Vidya Dehejia is producing a volume, *India through the Lens, Photography 1840–1911*, to accompany her exhibition of the same name that is scheduled to open in November 2000. At the same time, Dr. Dehejia is conducting research for a book and exhibition of south Indian bronzes of the

Chola dynasty made between the ninth and thirteenth centuries. She is also preparing a publication about India for a series entitled "The Sources of Art History" being produced by Harvey Miller Publishers.

Massumeh Farhad, associate curator of Islamic art, has been pursuing ongoing research concerning later painting of the Safavid dynasty (1501–1732) and its patronage, on the *Shahnama* (The King's Book of Kings), and on the *Falnama* (Book of Omens). Ann Gunter, associate curator of Ancient Near Eastern art, continued her study of the Hauge gift of ancient Iranian ceramics, as well as her work on two books, *Defining Cultural Boundaries in the Eastern Mediterranean, ca. 1000–600 B.C.*, and *Charles Lang Freer and Egypt*.

Jane Norman, exhibitions conservator, is continuing her studies of the physical properties of Japanese and Chinese lacquer.

Members of the department of conservation and scientific research continue technical studies on Asian metalwork (Paul Jett); Chinese jades (Janet G. Douglas); papers used by Whistler and Indian (Martha Smith), gilded bronzes (Blythe McCarthy, principal investigator, with funding from the National Park Service); Japanese raku ceramics (McCarthy); and the structures of East Asian paintings (John Winter with Marco Leona and Jennifer Giaccai in a project funded by the Andrew W. Mellon Foundation). Dr. Winter is also working on a related book, *East Asian Paintings: Their Materials, Structures, Techniques, and Deterioration Mechanisms*.

## Center for Folklife and Cultural Heritage (formerly, Center for Folklife Programs and Cultural Studies)

### *Richard Kurin, Director*

At the January, 1999, meeting, the Smithsonian Institution Board of Regents endorsed our change of name to the Center for Folklife and Cultural Heritage, from the previous Center for Folklife Programs and Cultural Studies, thus leaving us better equipped to do our job. "Cultural heritage" resonates much better with all sorts of community-based groups, both in the United States and around the world, interested in the study, presentation, and conservation of their cultures. "Folklife" still allows people to locate us conceptually as a unit dedicated to living people and grassroots, vernacular traditions. We have become concerned with the training of community scholars, leading to several programs, and we recognize the need to help train students from the academy for public cultural work and have begun a graduate course in the subject with the George Washington University. More recently, we have been exploring issues of cultural heritage policy.

As an example of these outreach efforts, the Center and Children's Television Workshop (CTW) cosponsored a half-day symposium at the National Museum of American History that examined the 30-year history of diversity and multicultural programming on "Sesame Street," the longest-

running television series in the world. Several cast characters presented a sketch about diversity to children from the Smithsonian Early Enrichment Center and the adult audience from the Corporation for Public Broadcasting, Reading Is Fundamental, Congressional offices, and media representatives, among others. The Center's cosponsorship of the symposium was based on shared values around diversity and multiculturalism and the important implications of the CTW "Sesame Street" model for the development of cultural heritage policies in other media, cultural, and educational institutions.

In January, the Center hosted a forum for the Smithsonian Congress of Scholars on our varied involvement in cultural research as public scholarship. Staff members presented case studies on the questions and hypotheses that are the starting points for our research, our methodologies, and the intellectual, programmatic, and policy/applied implications of our work. The case studies provided an introduction to discussion with colleagues in research positions throughout the Smithsonian on issues such as the nature of humanities versus physical sciences research, and the value of research collaborations with community-based cultural workers and educators.

These collaborations can be seen in many recent Smithsonian Folkways projects. *Praise the Lord! Gospel Music in Washington, D.C.* is the product of a collaboration with the Smithsonian Institution's Anacostia Museum and Center for African American History and Culture, and provides the audio background to the exhibition, "Speak To My Heart: Communities of Faith and Contemporary African American Life." The two CD set, *The Mississippi: River of Song* involved collaboration with Smithsonian Productions and other individuals and organizations, and became a companion to the public radio and television documentary series, book, home video, and Web site with educator's guide. And *Taquachito Nights: Conjunto Music from South Texas* was recorded from live performances at the 1998 Conjunto Festival in San Benito, Texas, and was produced in collaboration with the Narciso Martínez Cultural Arts Center and in conjunction with the Smithsonian Folklife Festival.

Jointly developed by the Center and the Smithsonian Institution Traveling Exhibition Service, the exhibition "Creativity and Resistance: Maroon Cultures in the Americas" opened in March at the National Civil Rights Museum in Memphis, Tennessee. The exhibition highlights the cultural traditions and historical documentation of the Maroon experience as expressed through the voices of contemporary Maroon peoples of Jamaica, French Guyana, Suriname, and the Seminole community along the U.S.-Mexico border. On June 20, the day following the traditional Juneteenth celebration of the abolition of slavery in Texas, members of the Texas Seminole Maroon community traveled to San Antonio for the opening of the exhibition at the Institute for Texas Culture. The show continues to travel to sites throughout the United States.

Collaborations continued with the Center's cohosting with UNESCO a working conference entitled, "A Global Assessment of the 1989 Recommendation on the Safeguard-

ing of Traditional Culture and Folklore: Local Empowerment and International Cooperation." This conference was the culmination of a decade-long UNESCO initiative aimed at deepening awareness of and commitment to cultural expressions—sometimes referred to as intangible cultural heritage—that incorporate folklore, popular culture, and grassroots expressions. Over 35 conference attendees, 30 observers, and some 20 Smithsonian and UNESCO staff members focused on the 1989 Recommendation in light of the profound sociopolitical and technological changes that have occurred in the ensuing decade and the way these have influenced, and been influenced by, traditional cultures. Over the course of the conference, working groups concentrated on three areas: legal protection; national cultural policy; and the relationship between traditional cultures and a variety of current environmental and sociopolitical issues. These issues included cultural identity, gender, sustainable development, globalization, peaceful coexistence of ethnic groups, conflict prevention, youth cultures, and the impact of new information technologies. Smithsonian and UNESCO staff realized a shared goal of having community practitioners and leaders sit together with academics and representatives of governments and philanthropic institutions. This succeeded in strengthening the original intent of the 1989 Recommendation by reformulating it as an Action Plan and expanding its vision in significant ways, among them: focusing institutional protection not only on folklore items but on the practitioners themselves and on the processes through which they nurture and develop their heritage; assisting communities in locally based measures to protect and safeguard their own traditions with the support of national, regional, and international bodies; and developing the protection of traditional cultural practitioners and practices within a framework of international standards of human rights.

The Smithsonian Folklife Festival once again was the venue where long-term collaborations with governments, regional organizations, local communities, and individual participants came together to present varied grassroots traditions. The New Hampshire program was organized around four theme areas: "Home, Town & Community," "Ingenuity & Enterprise," "Seasonal Work & Recreation," and "Farm, Forest, Mountain & Sea." Added to this was a lively musical component and several special events, which contributed to the presentation of a microcosm of New Hampshire folklife. Some of the special events included a barn raising by the New Hampshire Timber Framers Association and Bensonwood, an Old Home Day celebration with one of the state's oldest community bands and a fireman's muster, and Franco-American Day that acknowledged the importance of French-Canadian traditions in shaping the state's history and present-day character. The program was produced with the New Hampshire Commission on the Smithsonian Folklife Festival and its nonprofit affiliate Celebrate New Hampshire Culture in partnership with the New Hampshire State Council on the Arts, Department of Cultural Resources.

The Romanian program was the culmination of American scholars working with colleagues from the Romanian Cul-

tural Foundation, ASTRA Museum, the University of Bucharest, the Peasant Museum, Aid to Artisans, the Government of Romania, and other institutions to develop the idea of “gateways to Romania” as an organizing concept for the Festival program. The Festival offered metaphoric access to everyday life, ritual, and knowledge of and about Romania; and literal access as skilled carpenters and woodworkers from the Maramureș region erected traditional gateways on the National Mall. The carpenters also demonstrated their skills of traditional basilica building, pointing to the importance of the sacred and ritual arts in Romanian life, along with icon painters, carvers, and egg decorators. Music and dance groups from Moldavia, Transylvania, and Wallachia performed a range of rural celebratory traditions. And a variety of craftspeople including weavers and potters demonstrated the arts of everyday life in various regional styles. The program was inevitably an interesting mixture of grassroots, popular, and official genres.

The South Africa Festival program “Crafting the Economic Renaissance of the Rainbow Nation” presented over 100 craftspeople, music and dance performers from each of the nine provinces. Text panels described the cultural and linguistic diversity of each province and its natural resources, provided overview of how traditional artisans and provincial and national government representatives work to craft cultural policy, public aesthetics, and sustainable employment and cultural enterprises based on the diversity of grassroots cultural communities throughout the nation. Participants and officials discussed various topics with visitors—culture and protest, and contemporary issues of traditional culture and economic development—at the *shebeen*, a reproduction of the matchbox-like family houses that met the need for social centers under the racially restrictive social codes of the former apartheid system. The program was produced with the collaboration and support of the South African Department of Arts, Culture, Science and Technology and the National Arts Council.

The Fifth Annual Ralph Rinzler Memorial Concert featured two bands from recent immigrant groups, the Yuri Yunakov Band and Ensemble Tereza. The Yuri Yunakov Band played music from Bulgaria and the Republic of Macedonia that is known for its haunting melodies, dense ornamentation, and complex rhythms. The contemporary style is known as wedding music, because it most often accompanies dancing at life-cycle celebrations such as weddings and baptisms. The program featured instrumental music from various regions of Bulgaria and a Rom (Gypsy) repertoire. This repertoire is currently popular in the Bronx community of Roma from Macedonia, which dates from the 1960s. Ensemble Tereza performed Mountain Jewish music by recent immigrants from the eastern Caucasus, in particular Azerbaijan and Dagestan to New York. Lead singer Tereza Elizarova sang in a variety of languages including Dzhuhuri, Azeri, Turkish, Persian, traditional Hebrew, and nowadays Arabic and modern Hebrew. Dance styles include the energetic Caucasian men’s dances, as well as the stately circle dances and Turkish/Persian-style solo dancing most often performed by women.

And in another collaboration, a conjunto concert and dance party was produced with the National Museum of American History’s “Encuentros” program. This program marked the release of the Smithsonian Folkways recording *Taquachito Nights: Conjunto Music from South Texas*, produced in partnership with the Narciso Martínez Cultural Arts Center of San Benito, Texas.

This year’s Festival also hosted two teacher seminars, the annual five-day course “Bringing Folklife into the Classroom,” cosponsored with the Smithsonian Office of Education, and a special three-day intensive seminar organized for 30 New Hampshire teacher-fellows chosen to develop a folklife curriculum for their state through the New Hampshire program cosponsor, Celebrate New Hampshire Culture, under a grant from the National School to Work initiative. Both seminars used the Festival as a context in which teachers could develop techniques and skills in the use of multicultural resources that could enhance their classroom teaching. Teachers in the seminars shared stories about their own family and community traditions, met with curators for a behind-the-scenes look at how Festival programs are put together, and engaged with traditional artists from New Hampshire, Romania, and South Africa.

Through these collaborations and others, we continue to work with colleagues around the nation and the world in helping cultural communities flourish in ways that enhance their own well-being and also contribute to the larger human family.

## Hirshhorn Museum and Sculpture Garden

*James T. Demetrian, Director*

The Hirshhorn Museum and Sculpture Garden, the Smithsonian Institution’s museum for modern and contemporary art, is committed to increasing the awareness and understanding of art through acquisitions, exhibitions and publications, research activities, public programs, and the presentation of the collection in its galleries and outdoor exhibition spaces. The museum provides a public facility for the exhibition, study, and preservation of nineteenth- and twentieth-century art while presenting a spectrum of contemporary work.

The museum, which opened to the public in October 1974, spent much of the year generating celebratory exhibitions, programs, and activities in anticipation of the 25th-anniversary month of October 1999. On February 24 the third-floor collection galleries, which had been closed for renovations for more than six months, reopened with new carpets, a far more effective lighting system, and, in several areas, reconfigured walls and platforms. At the heart of the anniversary “makeover” was a complete rethinking, on the part of the curators, of how to tell the story of modern art using the Hirshhorn’s unusually broad and often surprising collection.

“The Hirshhorn Collection at 25: Celebrating Modern Art,” as the reinstallation was titled, was a team effort led by

Neal Benezra, the Hirshhorn's Assistant Director for Art and Public Programs, with Judith Zilzer, Curator of Paintings, and Valerie Fletcher, Curator of Sculpture. Energized by the new, mostly smaller spaces, up-to-date halogen lights, and many reframed or newly conserved objects, the curators went far in aiming for thought-provoking, revelatory combinations. Mixing Americans and Europeans, the famous and not so famous, and diverse styles and media, "The Hirshhorn Collection at 25" presented a roughly chronological procession of some 135 objects. Some of the more striking juxtapositions included Edward Hopper's lonely urban-dwellers with Elie Nadelman's attenuated carved-wood figures, both projecting a kind of pared-down, stark humanity for Depression-era America, and sculptures by Henry Moore and Alexander Archipenko employing taut string, revealing the influence of technology on modern sculpture despite, in the case of Moore, the influence of nature. Among other artists represented were Anni Albers, Constantin Brancusi, Daniel Baranoff-Rossiné, Jean Dubuffet, Alexandra Exter, Man Ray, Clyfford Still, Peter Voulkos, and Charmian von Wiegand. A similar redesign in the sculpture ambulatory also underscored stylistic affinities and crosscurrents.

"The Hirshhorn Collection at 25" was well received by the press, prompting a *Washington Post* critic to write, "The collection has never looked better. . . . Old favorites . . . have begun to sing again, [and diverse artists] seem very much attuned here." The reviewer concluded that an installation designed to "prod viewers to look anew at the museum's best-known works, as well as at others rarely seen" could only create a successful experience and the Hirshhorn's new look was proof positive of its emergence over 25 years as "a vital and respected national museum of modern and contemporary art."

Commemorations of the museum's anniversary continued in April. First, the Hirshhorn's genesis as a public museum based on private philanthropy was underscored in a small show that ran from April 7 to May 9. Titled "Faces of Friendship: The Art-World Circle of Joseph and Olga Hirshhorn in Documentary Photographs," the show featured 51 photographs from an archival collection donated to the museum by Olga Hirshhorn, the founding donor's widow. The exhibition presented a multitude of camera-made images, many personally inscribed to the collector, of such well-known personalities of public life and international art of the 1950s to 1970s as Presidents John F. Kennedy and Lyndon Baines Johnson, Chief Justice Abe Fortas, Smithsonian Secretary S. Dillon Ripley, British art historian and TV host Sir Kenneth Clark, art dealers Sidney Janis of New York and Daniel Kahnweiler of Paris, painters Pablo Picasso and Georgia O'Keeffe, sculptors Alberto Giacometti and Alexander Calder, and numerous younger artists. This revealing collection of mementoes started after Olga Hirshhorn, seeking to surprise her husband with a holiday gift of an inscribed photo from one artist-friend, expanded the idea and urged virtually all of the benefactor's intimates and associates to pay their respects with images of themselves.

The month of April was also highlighted by "Hirshhorn Open House: Celebrating 25 Years," featuring a full afternoon on April 25 of hands-on art-making activities for families, several storytelling sessions, musical selections by the Ambassador String Quartet, and a gallery talk on the ghostly figurative works of Portuguese artist Julião Sarmento in the Directions Gallery. Director James T. Demetrian capped off the day with a lecture reflecting on the quarter-century evolution of the Hirshhorn collection.

Plans proceeded, meanwhile, for October 1999's anniversary exhibition, "Regarding Beauty: A View of the Late Twentieth Century," and the fund-raising gala, also that month. The exhibition's co-organizers Neal Benezra and Olga M. Viso, Associate Curator, finalized the loans of 88 works to be assembled from more than 55 international lenders, and worked painstakingly with the Exhibits Department's Edward Schiesser to reconfigure second-floor galleries to accommodate several room-sized installations, a "Media Arts" theater, and other custom designs to be integrated into the show.

Financial support received from numerous entities reflected a general increase in fund-raising initiatives at the Hirshhorn. A 1999 sampling includes the Luso-American Development Foundation (in support of the Julião Sarmento exhibition); Vivian and Elliot I. Pollock (in support of the "Young at Art" programs); and the Canadian Embassy, Pro Helvetia Arts Council of Switzerland, and the Institute for Foreign Affairs of the Federal Republic of Germany (in support of the "Regarding Beauty" exhibition). The Andy Warhol Foundation for the Visual Arts, Inc., Peter Norton Family Foundation, and Lannan Foundation have repeatedly supported Hirshhorn projects, as have numerous generous individuals both on and off the Board of Trustees. Benefactors for the 25th-anniversary fund-raising gala included Merrill Lynch, Janine and J. Tomilson Hill, Robert Lehrman, Mary and John Pappajohn, and Mitchell Rales.

The museum's Board of Trustees experienced renewed energy and vigor following congressional approval, endorsed by the Regents, to expand from ten to up to 25 members. The Board was also saddened by the deaths of cherished longtime members and former Chairmen Sydney Lewis on March 12 in Richmond, Virginia, and Jerome Greene on May 27 in New York. Both individuals received broad recognition for their national work as patrons and collectors. John Pappajohn of Des Moines, Iowa, joined the Board in May, and Anthony T. Podesta of Washington, D.C., became a member of the Committee on Collections.

Acquisitions this year were highlighted by *Ave Years What? (for Marianne Moore)*, 1967, by American artist Mark di Suvero (b. 1933), adding new strength to the museum's collection of monumental steel sculpture. Rising diagonally some 40 feet from a street-level section of the Sculpture Garden, this red composition of industrial I-beams—with a suspended, moving V element—epitomizes di Suvero's gift at communicating human fragility in intractable, industrial materials. It was installed on the street-level plot of the Sculpture Garden in mid-August. Among other important

acquisitions for the year were several that kept the museum collection current with recent examples of contemporary art: Luc Tuymans's *Passe-Partout*, 1998, an oil painting; Julião Sarmiento's *Licking the Milk Off Her Finger*, 1998, a rare sculpture by this artist included as part of his "Directions" show; Charles Simonds's *Rock Flower*, 1986, a clay sculpture; Katharina Fritsch's *Display Stand with Madonnas*, 1987–89, a sculpture; and *Stereoscope*, 1999, a film with several related drawings by William Kentridge.

The Hirshhorn's large solo shows during the year featured two American painters of the same generation—one realist and one abstract—each of whom holds a significant position of influence in contemporary art. "Chuck Close," on tour from the Museum of Modern Art in New York, was launched on October 15 with a filled-to-capacity lecture by the artist, a depicter of monumental faces who has gained a wide following among the general public and art world. Receiving wide recognition in the Washington press, the Close show also brought attention to a wheelchair-bound artist whose partial paralysis since 1988 has not stopped him from continuing to develop a distinctly engaging style of dematerializing rectangles that come to life as giant faces—and penetrating character studies—when viewed from afar. The Close show was followed by "Brice Marden, Work of the 1990s: Paintings, Drawings, and Prints," touring from the Dallas Museum of Art, which opened on May 27. Marden's sensuous and colorful linear abstractions, which show the influence of Jackson Pollock as well as aspects of East Asian art, encompasses calligraphic "Cold Mountain" and other evocative images that stand as testament to the dynamic persistence of abstraction today. Although representing nearly opposite ends of painting's spectrum, the exhibitions generated strong followings and solid attendance.

Reflecting a general trend at the Smithsonian, the breadth and focus of education programs expanded. Department head Linda Powell's staff introduced a "Young Artist" program for school groups, "Art Explorers" workshops for adults, the "Improv Art" on-site family workshop, a series of gallery tours by Washington area artists, and a "Poetry Slam" competition for local poets held outdoors on the Plaza. As with last year, the public participated in writers' workshops, workshops for teachers, meet-the-artist gallery talks for exhibitions, First Friday gallery talks by staff, and New Voices gallery talks by local graduate students in art history. Art Night on the Mall, a four-museum program of late Thursday hours during summer, again combined performances of Latin music outdoors with free films and gallery talks and tours.

"Directions" shows this year, showcasing new visions by two important emerging artists from abroad, featured a suite of just-completed narrative figures by Portuguese painter Julião Sarmiento (b. 1948), opening February 3 with a pre-view attended by Portuguese Ambassador Fernando Guimaraes, and *Noli Me Tangere*, 1998, a two-sided, floor-to-ceiling video projection of a colossal figure by British artist Sam Taylor-Wood, the first solo show in an American museum for this young internationally known British artist.

## National Air and Space Museum

### *Donald S. Lopez, Acting Director*

Fiscal Year 1999 brought many changes to the National Air and Space Museum. Most significantly, on July 13, 1999, Admiral Donald D. Engen, who had been director of the museum since July 1, 1996, was killed in a motorized glider accident. Donald S. Lopez, deputy director of the museum, was named acting director. Three months after Admiral Engen's death, his dream of an aviation and space center at Washington Dulles International Airport was given a tremendous boost when Steven F. Udvar-Hazy pledged \$60 million toward the project. It was the single largest cash gift in the Smithsonian's 154-year history.

During the fiscal year, the museum celebrated several historic events. On October 29, 1998, when STS 95 was launched with former senator John Glenn on board, the Museum set up several HDTV monitors allowing hundreds of visitors to watch the event live via the newest broadcast technology. The museum also hosted a series of events to celebrate the 30th anniversary of the Apollo 11 Moon landing.

In fiscal year 1999, the total number of visitors to the museum since its July 1976 opening exceeded 200,000,000. Renovation of the building continued, with emphasis on minimizing disruption to museum visitors.

Significant acquisitions to the museum included the 20,000-pound Spacelab module. On October 3, 1998, it arrived for storage at Washington Dulles International Airport, where it will remain until it goes on display at the Dulles center. The gondola of Breitling Orbiter 3, which completed the first nonstop balloon flight around the world, went on display in the museum's Milestones of Flight gallery in September 1999.

The museum received a "Save America's Treasures" grant (a joint congressionally funded program of the White House Millennium Council and the National Historic Trust) to preserve "threatened objects of the Apollo era." A special environmentally controlled storage facility was constructed at the Paul E. Garber Preservation, Restoration and Storage Facility, and work was begun to stabilize all of the flown lunar spacesuits in the national collection and to research and publish authoritative guidelines for their safe storage and display. These guidelines will also form the basis for spacesuit storage and display at the new center at Dulles. The balance of the Save America's Treasures grant is being earmarked to support the restoration of the giant Saturn V rocket located at the NASA-Johnson Space Center in Houston, Texas.

During fiscal year 1999, the site design for the new center at Dulles was completed. The site work will be provided by the Commonwealth of Virginia as a contribution to the project.

### Collections and Research

The three scholarly divisions at the National Air and Space Museum, the Division of Aeronautics, the Division of Space

History, and the Center for Earth and Planetary Studies (CEPS), continued their work in scientific and historical research, collecting significant artifacts, and developing exhibitions related to all aspects of aviation and space flight.

The Smithsonian Institution History of Aviation series was replaced by the Smithsonian Institution History of Aviation and Spaceflight series. Allan A. Needell, chair of the Division of Space History, and Dominick A. Pisano, chair of the Division of Aeronautics, serve as series editors.

Senior Aeronautics Curator Tom Crouch's book *Aiming for the Stars: The Dreamers and Doers of the Space Age* was published by Smithsonian Institution Press, and Rick Leyes's *The History of North American Small Gas Turbine Aircraft Engines* was published by the American Institute of Aeronautics and Astronautics.

CEPS continued an active research program in planetary and terrestrial geology and geophysics using remote sensing data from Earth-orbiting satellites and manned and unmanned space missions. The scope of research activities in fiscal year 1999 included work on Mercury, Venus, the Moon, and Mars, and corresponding field studies in terrestrial analog regions. CEPS staff study a variety of geophysical processes, such as volcanism, floods, cratering, tectonics, and sand movement. Of particular interest are studies of past and present Mars climate, using data from active spacecraft such as the Mars Global Surveyor. CEPS staff are also involved in mission design and landing site selection for future Mars exploration. Many of the terrestrial studies also address topics of current concern for global climate change.

In addition to the Spacelab and Breitling Orbiter 3, major items added to the collection in fiscal year 1999 included a full-scale engineering prototype of Mars Pathfinder, the flown Faint Object Spectrograph from the Hubble Space Telescope, and a digital camera carried by former senator John Glenn on his recent space shuttle mission. Fiscal year 1999 saw the beginning of a major shift toward preparing the collections for the move to the planned center at Dulles. The Collections Division entered into a partnership with Rolls Royce NA to assist in creating the Rolls-Royce Aviation Heritage Trophy competition. NASM authored an Aircraft Restoration Judging Guideline and assisted in the actual judging of the aircraft in the highly successful inaugural competition.

Several long-term projects to complete environmental control systems in storage buildings at the Garber Facility were completed. This allowed the Collections Processing Unit to complete inventories of the objects stored in these particular buildings and accomplish major strides in the project to barcode the objects. The Restoration/Preservation Unit of the Collections Division began the shift from major restoration projects to preparing artifacts to be moved to the center at Dulles. Major restoration work on the Soviet SA-2 missile transporter, the Aichi Seiran, and Nieuport 28 was completed. The exterior of the aft fuselage of the Boeing B-29 *Enola Gay* was polished. In addition, work on one of the first projects being prepared for the move to the center at Dulles, the Soviet MiG-15, was begun.

The Business Aviation exhibition was removed from Gallery 104 in the NASM West End. The Beech King Air was lowered, and it and the Cessna Citation were then disassembled, mounted on stands, and prepared for transport.

The Henri Keyser-Andre conservation intern for 1999 accomplished a conservation project on the Mars Viking Lander and a badly corroded navigational sextant that had been discovered during an earlier collections inventory.

As of January 1, 1999, the museum's new collections information system, The Museum System (TMS) was fully operational. After rigorous testing, existing collections data were migrated into the new system, and a new decentralized method of inputting object information was adopted. Curators and Collections staff now share the responsibility for entering data and for ensuring their accuracy and completeness. When the data were converted, TMS contained basic accession records for 32,635 objects. Due to limits of the former CIS system, few of these object records had significant contextual information and none had images. During fiscal year 1999 a coordinated program was initiated to close a backlog of uncatalogued objects and add historical information and other context to TMS object records in place. By the end of fiscal year 1999, TMS contained over 40,000 records and nearly 20,000 images. Approximately 13,000 object records had had basic historical information added as well, significantly exceeding the performance goals originally set for the transition program.

The Archives Division began reviewing its database systems with the intent of replacing its DOS-based software with a Windows compatible system. Near the end of the year, software, which will be tested in FY 2000, was selected. The museum also became a member of SIRIS (Smithsonian Institution Research and Information System). The new software and SIRIS will enhance the museum's ability to manage collections and to make those collections available to the staff and the public.

Processing of the Aircraft Technical Files, consisting of over 400 cubic feet of reports, photographs, and publications about heavier-than-air flight from its beginning to the present, was completed.

## Exhibits and Public Service

The pace of exhibit work for the center at Dulles remained brisk. Accomplishments in fiscal year 1999 included the completion of prototype display cases and exhibit stations, graphic design for signage, the design of the donor recognition wall and information desk, and a 3-D model of the major artifact placement layout.

In October 1998 a new planetarium show, "And a Star to Steer Her By," opened in the Planetarium. It explores the tools humans have used, from stars to satellites, to meet the challenge of navigation. Complementing the planetarium show is "GPS: A New Constellation," a new exhibit that explores the Global Positioning System.

Two temporary exhibits were added to the Space Race gallery in June. "The Soviet Challenge in Space: Illustrating the Threat" is a display of 12 paintings created for the De-



fense Intelligence Agency to illustrate Soviet weapons systems and advanced technology during the Cold War. The other exhibit is on the Faint Object Spectrograph. In time for the anniversary of the Apollo 11 Moon landing in July, a visitor-operated video camera was placed in the Museum's lunar module so visitors could look around inside the craft.

Planning and development work continued on several other major projects. In fiscal year 1999 the label script and much of the exhibition design was completed for "Explore the Universe," a major new permanent exhibition scheduled to open in September 2001, as well as the design for the revised Air Transportation hall, scheduled for completion in 2002. The planning document for "Dream to Fly," a future exhibition on African Americans and aviation, was also completed. Planning and development of *Up, Up, and Away*, a new IMAX film on vertical flight, continued this year as well.

Maintenance of older exhibits and refurbishment of public spaces in the museum were given high priority. Maintenance work this year included a complete redo of the aging Douglas World Cruiser exhibit in the Pioneers of Flight gallery, and upgrades to several other galleries. Also completed this year was a major expansion and redesign of the Museum Shop.

In addition, planning is under way for a new Exploring the Planets gallery. And in fiscal year 1999, major upgrades to the Looking at Earth gallery, including replacement of large photomurals, oblique air photos, and transparencies in the "What's New" section, were begun. Upgrades to the Exploring the Planets gallery replaced outdated material on observational tools, asteroids, Mercury, and Mars.

Through the Regional Planetary Image Facility (RPIF), CEPS continued its mandate to NASA-funded investigators, other interested researchers, and the general public by providing access to catalogued collections of imaging data from all American spacecraft missions. RPIF staff conducted tours through the facility for visiting groups ranging from two to 40 people. The data manager also continued development of a Hypercard guide to facility holdings, accessed by our users through a dedicated RPIF computer workstation.

The Public Services Division recruited and trained 35 new docents. In addition, in-service training for new and experienced docents was held monthly. The Education Unit conducted ten teacher workshops, which reached 227 teachers. Education also produced 51 programs for families and the general public, which reached more than 3,100 visitors and produced seven school programs for five different schools, in which 370 students participated. They also supported the Challenger Center's production of 11 Family Science Night events, in which approximately 3,300 people participated. The annual Internship Program supported 13 students (June 1 to August 6, 1999).

Live demonstrations and other related activities comprising some 1,171 programs for 91,673 visitors to the How Things Fly gallery were implemented. The Explainers Program trained and worked with 32 student Explainers. In the How Things Fly Gallery attendance usually exceeded 10 percent of museum attendance. In the How Things Fly Visitor Center, volunteers assisted 27,646 visitors.

The Educational Services Center also distributed more than 60,000 copies of publications and responded to 3,090 mail inquiries from teachers, students, and the general public.

## National Museum of African Art

*Roslyn A. Walker, Director*

The National Museum of African Art celebrates the rich visual traditions and extraordinarily diverse cultures of Africa and fosters an appreciation of African art and civilizations through its collections, exhibitions, research, and public programs.

### Acquisitions

Among the most significant art works acquired by the museum in the past year were a rare set of polychromed wooden panels carved in high relief from the Nkanu peoples of the Democratic Republic of the Congo, and a 92-pound D'mba mask from the Baga peoples of Guinea, one of the largest masks in all of Africa. The mask was donated to the museum by internationally known contemporary artist Armand Arman and his wife Corice, a fashion consultant and business manager. An important donation of 14 traditional sculptures from central and eastern Africa, the gift of New York businessman Lawrence Gussman, fills gaps in the museum's collection. These sculptures were showcased at the museum.

In addition, the museum's Eliot Elisofon Photographic Archives acquired three important collections: The Kyriazis Photographic Collection of images of activities and places in Ethiopia taken from 1950 through 1970, The Robert and Nancy Nooter Ethiopian Collection of images of activities and places in Ethiopia taken in 1988, and The Leon de Souseberghe Collection of images of the Pende peoples in the Democratic Republic of the Congo, taken from 1955 through 1957.

### Exhibitions

The first level of the National Museum of African Art houses several permanent exhibitions drawing on the museum's collection: "Images of Power and Identity," "The Art of the Personal Object," and "The Ancient West African City of Benin, A.D. 1300–1897." In addition, in collaboration with the Museum of Fine Arts, Boston, the museum offers "The Ancient Nubian City of Kerma, 2500–1500 B.C.," a loan exhibition of works from the permanent collection of the Museum of Fine Arts, featuring objects from Kerma, an ancient Nubian city that was located on the Nile River. The exhibition was organized by the Museum of Fine Arts, Boston, and its Department of Ancient Egyptian, Nubian and Near Eastern Art; all objects are from the Harvard University-Museum of Fine Arts, Boston, Expedition.

Also located on the first level is the Sylvia H. Williams Gallery, which was the location of "South Africa,

1936–1949: Photographs by Constance Stuart Larrabee,” and “Claiming Art/Reclaiming Space: Post-Apartheid Art from South Africa.”

The first level also houses the Point of View Gallery that presents small temporary exhibitions that focus on specific themes or objects. On view were “African Forms in the Furniture of Pierre Legrain,” “Sokari Douglas Camp: Church Ede, A Tribute to Her Father,” and “Hats Off: A Salute to African Headwear.” Also featured on the first level was “New Acquisitions: Gifts from the Lawrence Gussman Collection.”

The museum hosted, in its large second-level gallery, “Baule: African Art/Western Eyes.” In addition, the gallery was the site of one component of the exhibition “Wrapped in Pride: Ghanaian Kente and African American Identity,” a unique collaboration between two Smithsonian museums, the National Museum of African Art and the Anacostia Museum and Center for African American History and Culture. The two-sited exhibition offered visitors not only a glimpse into the history and meaning of the colorful African textile, but provided both programming and interactive activities that engaged diverse audiences. School groups and teachers from hundreds of schools took advantage of related programming including exhibition tours, weaving demonstrations by master weavers from Ghana, and teacher workshops.

Four large cast concrete screens by Nigerian artist Adebisi Akanj, donated to the museum in 1994 by Mr. and Mrs. Waldemar A. Nielsen, were restored by the museum’s conservation department. The screens will be featured in an exhibition on several artists from the important Oshogbo art movement in southwestern Nigeria.

The museum’s educational offerings, which spring from the permanent collections and special exhibitions, provide audiences with provocative and insightful views of the world of African art. An array of tours, workshops, and focus programs gave students of all ages their first encounters with real works of African art.

Highlights included a family day on the arts and culture of Ghana with food, music, song, dance procession, games, demonstrations, and storytelling; and a conservation clinic open to the public in which conservation staff advised visitors on the proper care of their collections. A South African film series that accompanied the “Claiming Art/Reclaiming Space” exhibition attracted standing-room-only audiences.

The museum’s extended summer hours drew hundreds of visitors on Thursday nights as part of “Art Night on the Mall.” Youngsters made colorful hats and then showed them off as they paraded to the exhibition “Hats Off!: A Salute to African Headwear,” while art lovers had the opportunity to talk with South African artist Rudzani Nemasetoni. In addition, the museum’s entrance pavilion filled with the sounds of musicians from Cameroon and South Africa.

In addition, workshops and demonstrations by practicing artists engaged attentive audiences eager to meet and talk with African artists. For example, Nigerian artist Sokari Douglas Camp conducted a two-day workshop for teachers in which participants created sculptures from ordinary materials and Pamela Botchway of Ghana taught visitors how to tie their own African headwraps in a public demonstration.

The museum also continues to make itself accessible to people with special needs. Tours for hard-of-hearing visitors were made possible through a portable FM Assistive Listening System. This system also allowed hard-of-hearing visitors to participate in educational programs in the workshop and lecture hall. Sign language interpreters for deaf visitors were available upon request for all museum programs.

## Publications

Throughout the year, the museum published informational materials to accompany exhibitions.

## Photographic Archives and Library

The museum continues to be a leading research and reference center for the visual arts of Africa. The Warren M. Robbins Library, a branch of the Smithsonian Institution Libraries, contains more than 20,000 volumes on African art and material culture. The Eliot Elisofon Photographic Archives specializes in the collection and preservation of visual materials on African art, culture, and the environment.

## National Museum of American Art (Smithsonian American Art Museum)

### *Elizabeth Broun, Director*

The 1999 fiscal year was significant for award-winning exhibitions and on-line technology, accompanied by advances in education, research, and intern programs. Planning continued for the upcoming renovation of the Old Patent Office Building, with discussions focusing on gallery allocations between SAAM and NPG. The roof replacement project proceeded with some delays, preventing the reopening of the Lincoln Gallery before the year 2000. By the end of the year, the skylights in the gallery and along the South Wing had been replaced and judged a great success.

Having consulted with the Smithsonian Secretary, Provost, General Counsel, and other officials, the National Museum of American Art decided to begin using the name Smithsonian American Art Museum for all exhibitions, loans, and other activities, effective January 2000. This change was recommended by the museum’s Commission in order to link the museum more closely to the Smithsonian, shorten the name, and avoid confusion arising from the term “National.” If the new designation proves effective, the Smithsonian will seek formal approval from the Congress for the change.

The SAAM Collections Committee approved the purchase of Horace Pippin’s *Old Black Joe*, which will enhance the museum’s exceptional and growing collection of African American art.

The Smithsonian American Art Museum presented two complementary exhibitions that examined the California Gold Rush in celebration of the 150th anniversary of the discovery of gold in California. “The Art of the Gold Rush” featured



paintings, watercolors, and drawings from the 1850s, and the nostalgic views created a generation later. The museum was the only East Coast venue for this exhibition. "Silver & Gold: Photographs of the Gold Rush" featured rare daguerreotypes documenting this exciting time in American history.

"Picturing Old New England: Image and Memory" opened on April 2 and "Abbott Thayer: The Nature of Art" opened on April 22. Both are major loan exhibitions organized by SAAM curators William Truettner and Richard Murray, respectively. A catalogue to accompany the exhibition "Picturing Old New England" was coauthored by curators William Truettner and Roger Stein, along with three guest contributors, and copublished with Yale University Press. Tipper Gore, wife of Vice President Al Gore, was the Honorary Patron for the Thayer exhibition.

"Edward Hopper: The Watercolors," jointly organized by SAAM and the Montgomery Museum of Fine Art in Alabama, opened on October 22 to great reviews and large audiences. Commissioners Hugh Halff, Jr., Melvin Lenkin, and Peter Lunder contributed to make the exhibition possible. This was the final exhibition before the museum closed for renovations. "Edward Hopper: The Watercolors," by Virginia Mecklenburg, curator at SAAM, was copublished with W.W. Norton under a favorable contractual arrangement. The museum shop sold out of its initial order on the first weekend of the exhibition. A year 2000 wall calendar was produced for the show in cooperation with Universe Publishing. In addition, the New Media staff at the museum produced an extensive Web site called "An Edward Hopper Scrapbook" to complement the exhibition and offer a glimpse into Hopper's life, his friends and the paintings that have fascinated art lovers worldwide ever since Hopper first came to prominence during the mid 1920s.

The installation of "David Beck: L'Opéra," a miniature opera house with 207 automated hand-carved figures, was adroitly handled despite unusual challenges. The Education office arranged for special docents to be in attendance, to protect, explain, and operate this small wonder. For the first time, music was included in an exhibition installation.

"Daniel Brush: Gold without Boundaries" won the Smithsonian Exhibition Award for Best Design—justly recognizing this show as the most handsome produced at the Smithsonian (at its Renwick Gallery) during the past 18 months. "Glass! Glorious Glass!" continued drawing unusually strong attendance, accompanied by strong publicity.

On March 19, the Renwick Gallery of the Smithsonian American Art Museum opened two exhibitions: "Shaker: Furnishings for the Simple Life," an exhibition drawn from Commissioner Ken Hakuta's extensive collection of Shaker artifacts and "Dominic Di Mare: A Retrospective," a touring exhibition of fiber sculptures by Dominic Di Mare from the Palo Alto Arts Center.

A Memorandum of Agreement with the James Renwick Alliance, signed in March, was implemented with a pledge of \$110,000 in support for fiscal year 2000 for the Renwick Gallery. Curator-in-Charge Ken Trapp received a two-year \$68,000 grant from the Smithsonian's Scholarly Studies Program to conduct research on American Naval Presentation

Silver, which is expected to be the subject of a major book and exhibition.

The Museum's On-line Reference Desk, now renamed Ask Joan of Art, received a 1998 Exemplary Service Award at a Harvard University conference called "Reference in the New Millennium." This on-line reference service is a high priority for fund-raising for the museum.

In its continuing quest to provide on-line resources, the museum signed an interagency agreement with the National Endowment for the Arts that will provide \$430,000 over the next two years for digitizing 50,000 slides of works by 5,000 artists in the NEA's Visual Artists Fellowship Program from 1967 to 1995. The NEA Artists Archive will be hosted on the museum's Web site.

The Web site, redesigned and launched in January, won an award as "Best Museum Research Site" at the 1999 Museums and the Web conference in New Orleans in March. Depth of research information—a testament to the museum's long tradition of developing research resources—was cited by the judges. The New Media staff, working with the publications staff who handle fulfillment, introduced the capacity to process credit card payments on the Web site. Books and other products can now be purchased on-line with a credit card.

The museum's Registrar's Office successfully booked 60 venues for the extensive national tour planned for the renovation period, tentatively titled "Treasures to Go," scheduled to run from January 2000 through 2002. The Development office signed a marketing sponsorship contract totaling \$3.75 million with the Principal Financial Group of Des Moines. The sponsorship firm IMG of New York was also signed to help with the project, which will include media appearances, cable television specials, advertising, national media placement, advertorials, product licensing, and special events. Five national public relations companies were interviewed for the publicity aspect of the Principal Financial Group component of the contract, and a selection was forwarded to the Contracting Office for approval.

The education department continued breaking new ground by hosting artists' lectures including talks by Jesús Morales, Hung Liu, Robert Cottingham with Chuck Close, Malcah Zeldis, and David Beck. "The NMAA Educational Resources Guide for Teachers" was mailed to 3,500 teachers, and the tour booklet "Explore the National Museum of American Art" was republished. A number of partnerships helped raise funds for education programs at the museum, including the Prince George's County Schools for a "Reading Through Art" kindergarten program and the Fairfax County Public Schools for a K-12 Arts Curriculum (\$40,000 awarded by the NEA), and the Cafritz Foundation to develop teacher enrichment programs.

## National Museum of American History

*Spencer R. Crew, Director*

The National Museum of American History dedicates its collections and scholarship to inspiring a broader understanding

of our nation and its many peoples. The museum creates learning opportunities, stimulates imaginations, and presents challenging ideas about our nation's past through publications, family programs, electronic outreach and distance learning, community-based collaborations, and affiliations. In FY 1999, the museum acquired 5,712 objects, bringing the total number of the collection to 3.1 million and had a budget of \$32.96 million. The annual visitation was 5.6 million.

The museum continued its exploration of "What is American Identity?" by relaying the histories of individuals and groups who have made America what it is today. "American Identity," the organizing theme of the museum, brings together many of the activities—from exhibits, programs, symposiums, and collecting, into a framework concerned with what it means to be an American.

The museum's premier symbol of American Identity, the Star-Spangled Banner, was the centerpiece of activity in 1999. On December 1, 1998, the three-story-high flag was removed from its current display and laid flat on a platform in Flag Hall. It was thoroughly examined and conservators began to devise a full treatment plan. The Star-Spangled Banner was then carefully rolled and crated in January and moved into the specially constructed conservation lab near Flag Hall on the museum's second floor. This lab, with its floor to ceiling windows, provides the public with their closest look ever at the flag, which is carefully unrolled a few feet (and sometimes inches) at a time on an immense aluminum table. Conservators reach the flag by sitting or lying on a 35-foot-wide moveable gantry platform that is suspended above the flag. During the treatment phase of the Star-Spangled Banner Preservation Project, conservators will carefully vacuum the flag and then clean it using chemical solvents and detergents. Stitch by stitch, they will remove a linen lining added in 1914. The laboratory and the accompanying exhibition, "Preserving the Star-Spangled Banner: The Flag that Inspired the National Anthem," which explains the flag's history and describes the treatment process, opened to the public in May 1999. The Star-Spangled Banner Preservation Project is made possible with major support from Polo Ralph Lauren. Generous support and significant leadership are also provided by The Pew Charitable Trusts, the U.S. Congress, the White House Millennium Council, and Save America's Treasures at the National Trust for Historic Preservation. The History Channel broadcast an original one-hour documentary about the Star-Spangled Banner and the preservation project on December 3, 1998, and with the museum's Education staff, developed a companion teacher's manual, "Save Our History: Teaching the Star-Spangled Banner."

"Communities in a Changing Nation" offered another perspective on American Identity by exploring the promise and reality of life in the 1800s through the experiences of three different communities: factory owners and workers in Bridgeport, Connecticut; Jewish immigrants in Cincinnati, Ohio; and African Americans in the South Carolina low country. Subtitled "The Promise of 19th-Century America," it opened in February 1999.

On July 29, 1999, "Photographing History: Fred J. Maroon and the Nixon Years, 1970–1974" opened, coinciding with the 25th anniversary of the end of the Nixon Administration. It featured 120 of Fred J. Maroon's photographs, which document President Nixon's years in the White House. This exhibit has been added to the museum's Web site as a virtual exhibit, complete with textual narrative and audio recordings. Several programs were held with the exhibit, including a Smithsonian Associates discussion and signing of his 1999 coauthored book, *The Nixon Years, 1969–1974: White House to Watergate*, and a gallery talk hosted by Maroon and the exhibition curator.

The exhibition year began daringly with "Evel Knievel: Happy Landings." Evel Knievel's helmet and white leather jumpsuit and other memorabilia were installed alongside his Harley Davidson motorcycle in the museum's Road Transportation Hall. The museum hosted "Closings: the Life and Death of an American Factory," a documentary photography show from the North Carolina Museum of Art, examining one photographer's view of the last days of a North Carolina factory. The Smithsonian Institution Traveling Exhibition Service premiered "Americanos: Latino Life in the United States" at the museum in spring of 1999. This exhibit presented 120 photographs displaying the breadth and variety of the Latino experience.

"A Visual Journey: The Lisa Law Photographs," presented one woman's view of the sweeping cultural changes of the 1960s, as well as their origins and results. Lisa Law documented daily life, and the larger cultural and political events during this era, from the psychedelic music scene of San Francisco and Los Angeles to the spiritual and family-oriented world of commune life in New Mexico and Woodstock.

Showcase exhibitions included "Santo Pinhole: A Saint for Photography," which examined a tribute to Ansel Adams by New Mexican artist Elizabeth Kay. "Feather Trade" celebrated the centenary of American conservation with a look at the fad for feathered hats, hunting and collecting, and the beginning of the Audubon and conservation movement at the turn of the last century. "History in the News" case exhibits, spotlighting noteworthy or anniversary-related collections, included "Transistors: 50 Years Old" and a case entitled "Duke Ellington and the Smithsonian" as part of the Ellington centennial celebration.

The museum produced a wide variety of public programs, tours, outreach and educational programs, and hands-on learning opportunities. "Encuentros: Latino America at the Smithsonian" is a series of public programs that reflect the rich and distinctive contributions of Latinos to the history of the United States. In 1999, "Encuentros" programs included Puerto Rican guitarist Yomo Toro, a re-creating of the Carnaval de Ponce from Puerto Rico, the Ehecatl Aztec Dancers, Mexican-American performing artist Guillermo Gomez-Peña, Ehecatl Aztec Dancers, painter and storyteller Carmen Lomas Garza, Washington's own Latin American chamber choir Coral Cantigas, and the contemporary Chicano play *The Last Angry Brown Hat*. In addition, there were also fam-

ily workshops on santos and masking traditions, and a scholarly conference on the "Legacies of 1898."

For the 1999 centennial of Duke Ellington's birth, the museum took a leadership role in the celebration. The Smithsonian Jazz Masterworks Orchestra led with "Duke Ellington: A Centennial Tribute," a nationwide concert tour. It touched down in Washington, D.C., in February for the Duke Ellington 100th Birthday Celebration at the Kennedy Center, and in April presented Ellington's three rarely performed sacred concerts at the Washington National Cathedral. In July, the orchestra embarked on its first-ever world tour, "Duke Ellington Cotton Club Revue," visiting 14 cities and headlining in Canada, Europe, and the Middle East. The Program in African-American Culture continued its initiative to extend the Ellington Collection to teachers and students in Washington, D.C. On Ellington's birth date, April 29, the museum and students from Washington, D.C., were linked via satellite with students in Kansas City, Missouri, and Cleveland, Ohio, for a distance learning experience that included live performances, lectures, and Ellington family guests. In addition, the museum hosted the Ellington Youth Festival, which included poetry readings and an art show. One of the key additions to the museum's collection was the acquisition of archival material including music, correspondence, photographs, and newspaper articles relating to the activities of the Duke Ellington Orchestra, along with a Wurlitzer electronic piano and cigarette case owned and used by Ellington.

The Program in African-American Culture launched the multiyear series "African-Americans at the Millennium: From Middle Passage to Cyberspace." The focus of PAAC's annual conference was the Middle Passage, the second leg of the Atlantic slave trade triangle. This is a story of pain, survival, and transformation—a historic episode that transformed millions of people from Africans to African-Americans and gave rise to the construction of a social category called race.

The Chamber Music Program hosted its season series of concerts for Washington, D.C., audiences. The centerpiece of the program, the Axelrod Quartet, traveled with the Stradivarius quartet of instruments from the museum's collections, performing on these masterpieces in Fort Worth, Texas, and Toronto, Canada.

Always a high point of the year, the museum's annual "Holiday Celebration" drew more than 100,000 visitors in three days in December. Audiences sampled, participated in, and learned about the diverse ways American communities celebrate the holiday season through music, crafts, dance, and food.

FY 1999 saw the beginning of two new education programs developed by the Education and Visitor Services Department. In collaboration with the District of Columbia Public Libraries and Reading Is Fundamental (RIF), the museum launched a multiyear literacy and history education project called "The Story in History." As part of the project, ten classes of fourth graders from metro area "at-risk" schools came to visit the museum's Hands on History Room

(HOHR) twice. Each student had the opportunity to select three thematically related books to keep. In June, the children returned to the museum with their families for the culminating event of *The Story In History*, the Family Literacy Festival. This after-hours event featured award-winning authors reading from their books, storytellers, and related hands-on museum activities. Five hundred children, their families, and teachers attended. The second new program, "OurStory," addresses the museum's commitment to better serve families and children. Each program invites families to explore America's past through museum objects, literature, and hands-on activities.

The annual Kids Learning History Conference took place at American History in April, cosponsored by the National History Alliance and the National Council for History Education. More than 275 teachers and museum educators attended workshops and seminars designed to help them bring innovative educational practices into their classrooms and local museums.

"Disability and the Practice of Public History" was an interdisciplinary conference for disability scholars, public history and museum professionals, exhibit developers, and activists on integrating ideas about people with disabilities into history content, beyond issues of access.

The museum Web site (<http://americanhistory.si.edu>) continues to expand and better serve our audiences. This year was a blockbuster for virtual exhibitions such as "Edison After 40," "A Visual Journey: Photographs by Lisa Law," "The Feather Trade," and "Photographing History: Fred J. Maroon and the Nixon Years." Other new sites focused on collections ("Parthian Coins" and the "Ellington Archive Virtual Tour and Program") and events ("Encuentros," the "Disability and the Practice of Public History" Conference, and the "Duke Ellington Anniversary Site," which was nominated for a Smithsonian Institution Exhibition Award.

This year, the Lemelson Center for the Study of Invention and Innovation kicked off its 1999–2000 theme, "Invention at Play," an exploration of the creative role of play in the inventive process and the importance of invention in American toys, games, and sports. The annual showcase exhibition, "Sporting Invention," featured Howard Head's skis and tennis rackets, along with a prototype of a snowboard accessible to individuals with physical disabilities. To celebrate the 150th anniversary of Lewis Latimer, the Center commissioned the Brewery Troupe to create a puppet play about this African American inventor's life. "Lewis Latimer: Renaissance Man" was performed at the museum in 1998 for school and family audiences, and in March 1999 a taped broadcast of the show aired in more than 6,000 schools nationwide. The puppets, depicting Lewis Latimer, Frederick Douglass, and Thomas Edison, are now part of the museum's collection.

The Center's ongoing program "Innovative Lives" introduces middle schoolers to living inventors. In 1999, Ann Moore, inventor of the Snuggly baby carrier, and Newman Darby, inventor of the sport of windsurfing, came to the museum. To encourage use of invention and support research on invention, in 1999 the Center initiated the "Travel to

Collections Awards Program," which offers transportation awards for scholars to come and study at the museum.

The Affiliations Program gained momentum. In 1999, the museum had a total of 21 affiliate relationships with museums nationwide. Of those, eight active affiliations involve more than 350 loaned objects, with 10 other affiliations in the planning stages. The largest and most active affiliate in 1999 was The National Museum of Industrial History (NMIH), a new museum that will be located at the former Bethlehem Steel Corporation mill in Bethlehem, Pennsylvania. In 1999, American History dismantled its "1876: A Centennial Celebration" from the Arts and Industries Building after a 23-year run and sent it to Bethlehem. In addition, an American History team shipped 100 artifacts weighing more than 50 tons from the Arts and Industries Building to Bethlehem. That included the "Great Locomotive Switch": a Smithsonian rigging crew and two contracted rigging crews, with curatorial assistance from American History's train experts, moved three Smithsonian locomotives to new homes. The Jupiter was moved into the railroad hall at American History. The Olomana and the 11-ton Pioneer of 1851 went to Bethlehem on long-term loan to the new museum, along with items such as an 1875 Otis elevator, steam engines, a tractor, machine tools, telegraphy equipment, and a windmill.

Other Affiliations involved with American History included the Chabot Observatory in Oakland, California. Eight objects, including six telescopes, from American History's physical science collection are going on long-term loan to the state-of-the-art observatory and planetarium. Origins, a museum and cultural center in Arlington, Texas, received items from American History's sports history collection last year for installation at the Legends of the Game Museum in Rangers Stadium. The B&O Railroad Museum in Baltimore, Maryland, and American History are exploring collaborative research, exhibit, and educational programs. The first tangible step occurred in 1999, when American History lent the museum a nineteenth-century B&O signage drum that was used on a B&O caboose.

## National Museum of the American Indian

### *W. Richard West, Director*

The National Museum of the American Indian, established in 1989 by Public Law 101-185, is a hemispheric institution of living cultures dedicated to the preservation, study, and exhibition of the historic and contemporary life, languages, literature, history, and arts of Native Peoples. The museum also is dedicated to supporting and perpetuating contemporary Native cultures and communities.

Three days of events from September 26 to 28 celebrated key museum achievements as the National Museum of the American Indian also marked its first decade. The public opening of the Cultural Resources Center on September 26;

delivery of a seminal speech titled "Against All Odds" by NMAI Director W. Richard West to the national press corps about the purpose of the museum on September 27; and on September 28, a ground-breaking ceremony for the National Mall museum. The ground-breaking ceremony was covered by media from throughout the world and captured front-page attention in the *Washington Post* and the *New York Times*.

More than 1,500 museum members and others toured the new Cultural Resources Center (CRC) in Suitland, Maryland, which eventually will house the museum's entire 800,000-object collection. The collection is being moved from the Research Branch in the Bronx, New York. The CRC now serves as a research, study, and educational facility. At the Cultural Resources Center, which reflects Native design concepts and orientation thanks to extensive tribal consultations, indoor and outdoor ceremonial areas are available to tribal delegations. There tribal elders and others can perform ceremonies and rituals with objects from the collection connected to their tribes. NMAI Native artist fellows, Native interns, scholars, and researchers are other primary users of the Cultural Resources Center. Since its founding in 1989, the Smithsonian National Museum of the American Indian (NMAI) has worked closely and collaboratively with tribes throughout the Western Hemisphere. The museum's world-renowned collection has been available to tribes for inspection and ceremonial use. During these visits, tribal representatives have assisted the museum in identifying objects and explaining their traditional uses.

The museum's Community Services Department works regularly with tribes throughout the hemisphere in cultural exchanges, workshops, and other programs. For example, a daylong workshop was held by the NMAI in Sonoma County, California, to introduce a new generation of basket weavers from Pomoan tribes to a sedge and willow gathering area that was not known to them. As development erases traditional gathering areas for basket-making materials, connecting weavers to previously unknown sites helps to perpetuate their art and craft. The workshop was held in conjunction with an NMAI exhibition "Pomo Indian Basket Weavers, Their Baskets and the Art Market." Pomo weavers, storytellers, dancers, and others tribal members participated in the exhibition programming and traveled to New York from California.

In the past year, NMAI's interdisciplinary research has been focused in Peru and Mexico and the North American Plains, Southeast, and Southwest. Current research with and for indigenous communities is creating the inaugural exhibitions for the museum on the National Mall, which will encompass the worldview and philosophies, histories, and vitalities of indigenous peoples.

NMAI's curatorial staff is working collaboratively with the Seminole Tribe of Florida, Eastern Band of Cherokees of North Carolina, Oglala Lakota of South Dakota, and Quechua of Peru on the first several of approximately 40 tribal consultations that will be the basis of tribally curated exhibitions at the Mall museum. Tribes will also select objects from the NMAI collection to represent their cultures in

three planned exhibitions: "Our Universes," "Our Peoples," and "Our Lives."

A December 2, 1999, gala for the benefit of the endowment fund of the museum's George Gustav Heye Center endowment for the museum was held at the Pierre Hotel in New York City and resulted in a net profit of \$1.2 million. U.S. Senator Daniel K. Inouye, NBC News anchor Tom Brokaw, Ted Turner, Jane Fonda, and others helped to lead the event for the NMAI.

A new NMAI four-color 32-page quarterly publication named *American Indian* was developed during 1999 to replace the NMAI's use of *Native Peoples* magazine as well as the *Runner* and *Quarterly Calendar*. *American Indian* will be sent to all NMAI members beginning in January with a winter issue. The publication will focus the museum's mission-driven work throughout the hemisphere and will present NMAI members with an insider's view of the museum. The publication also will raise awareness of our development needs, as well as the progress of the Mall museum construction and programs and exhibitions at the GGHC.

Design and construction of the NMAI Mall museum was assumed by the Smithsonian in 1999. Assisting the Smithsonian are Polshek Partnership, Tobey + Davis, joint venture architects; Johnpaul Jones (Cherokee/Choctaw), design consultant; Lou Weller (Caddo/Cherokee), design consultant; EDAW, landscape architects; Severud Associates, structural engineers; Cosentini Associates, mechanical/electrical engineers; Donna House (Navajo/Oneida), ethnobotanist landscape consultant; and Ramona Sakiestewa (Hopi), interior design consultant.

## National Museum of Natural History

*Robert W. Fri, Director*

The National Museum of Natural History enhances the understanding of the natural world and humanity's place in it. The museum's researchers study natural and cultural diversity by collecting and identifying specimens of nature and human invention, establishing relationships among them, and explaining the underlying processes that generate, shape, and sustain their diversity. The close linkage among research, outreach, and collections stewardship is a hallmark of the museum, lending perspective and authenticity to its research and authority to its outreach.

With the opening of the Samuel C. Johnson Theater and the completion of work on the film *Galapagos* in 1999, the museum embraced a vivid and accessible new medium for presenting the diversity, complexity, and value of the natural world. The Johnson Theater and the other facilities in the new Discovery Center—the Atrium Café and the Museum Shops—promise to make the museum an even more rewarding place to visit.

New initiatives and technologies are making the museum the hub of a national network for science education.

Through live satellite links to the museum's Electronic Classroom, students and teachers take part in electronic field trips and research presentations conducted by Museum staff. Each participating school receives an "expedition kit" so that during the broadcast students can conduct an experiment while watching the demonstration at the museum.

Conrad Labandeira and Peter Wilf of the Paleobiology Department reported in the journal *Science* on their study of insect damage on fossil plant assemblages in southwestern Wyoming. Their research demonstrated that insect herbivores responded by increased levels of herbivory and in the variety of damage types on host-plant species. Focusing on an interval of time from the Late Paleocene to Early Eocene (from 56 to 53 million years ago) that is associated with the greatest rise in global temperatures during the past 65 million years, they documented the first evidence in the fossil record of a long-term insect herbivore response to a major temperature shift.

Tim McCoy of the Department of Mineral Sciences has been investigating how lava flows solidify on the surface of Mars by studying the Martian meteorite Zagami from the Smithsonian meteorite collection. The presence of different rock layers in this meteorite, one of only 13 known to come from Mars, suggests that lava flows may break up over long cooling periods, a common process that future Mars explorers (robots and humans) might encounter.

The museum received an unprecedented four-year grant from the National Science Foundation to support 13 biology, geology, and anthropology students in the museum's Research Training Program. Each summer, the program offers 24 to 28 undergraduate students from around the world an opportunity to explore their research interests under the direction of museum scientists.

Working with private-sector partners Scansite 3D, Steinbichler, and Virtual Surfaces, Inc., the museum's Department of Paleobiology and Morphometrics Lab are producing a virtual *Triceratops* that can be examined and manipulated by computer. At the same time, scientists and conservators are restoring the original fossil *Triceratops* and making molds that will be used to cast *Triceratops* models for display and study at other institutions.

"Ainu: Spirit of a Northern People," the first American exhibition exploring the 10,000-year-old culture of the native people of northern Japan, opened April 30, 1999. Produced by the museum's Arctic Studies Center, the exhibition and book of the same name were made possible in part by the generous financial assistance of the Nippon Foundation, Japan-United States Friendship Commission, and Japan Foundation.

The National Anthropological Archives received a grant from Save America's Treasures, a partnership of the White House Millennium Council and the National Trust for Historic Preservation, to preserve and make accessible a collection of 20,000 nineteenth-century Native American drawings. The drawings record their makers' lives and their experience of western expansion.

## National Portrait Gallery

*Alan Fern, Director*

The National Portrait Gallery is dedicated to the exhibition and study of portraits of people who have made significant contributions to American history and culture and to the study of the artists who created such portraiture. It collects, documents, and preserves portraits in all media as both historical and artistic artifacts.

An important exhibition exploring the world of science in the years surrounding the Revolutionary War—"Franklin & His Friends: Portraying the Man of Science in Eighteenth-Century America"—was organized by Brandon Brame Fortune, Assistant Curator of Painting and Sculpture, and Deborah J. Warner, Curator, Division of Science, Medicine, and Society, NMAH. Other exhibitions presented included "Theodore Roosevelt: Icon of the American Century," "Philippe Halsman: A Retrospective," "Paul Robeson: Artist and Citizen," "George and Martha Washington: Portraits from the Presidential Years," "Hans Namuth: Portraits," "Picturing Hemingway: A Writer in His Time," "Edward Sorel: Unauthorized Portraits," and "A Durable Memento: Portraits by Augustus Washington, African American Daguerreotypist."

Major acquisitions included a bequest of the painting of Thomas Jefferson by Mather Brown. Gifts included portraits of Lafayette attributed to Pierre-Paul Prud'hon, General George S. Patton Jr. by Boleslaw Czedekowski, Henry James by Ellen Emmet Rand, Richard Watson Gilder by Cecilia Beaux, Washington Irving by Charles Loring Elliott, drawings of Edna Ferber, Gordon Bunshaft, David Sarnoff and William Paley by Louis Bouché, and Jamie Wyeth by Andy Warhol. Purchases included a donative purchase of 25 photographs by Philippe Halsman, a full-length portrait of John F. Kennedy by Elaine de Kooning, a silhouette of Rufus King attributed to William Bache, and an oil sketch of Mike Mansfield by Aaron Shikler. A photograph of Rosa Parks by Ida Berman was acquired, along with photographs of Mohammed Ali, Malcolm X, and Stokely Carmichael by Gordon Parks, Ernest Hemingway by Yousuf Karsh, and a daguerreotype of Lemuel Shaw by Southworth & Hawes.

On January 9, 2000, the Gallery will close its doors to the public for approximately three years while the Old Patent Office Building, which houses the museum, undergoes a major renovation. Four new exhibitions drawn from more than 18,000 images in the Portrait Gallery's collection and four shows previously exhibited in Washington will travel throughout the United States and to Japan and Europe while the museum is closed. The new exhibitions include a major group of portraits of the U.S. presidents based on the museum's renowned Hall of Presidents; 75 paintings spanning more than two centuries, including works by the most important portrait artists the nation has produced; a wide-ranging group of 60 photographs of notable American women of the twentieth century portrayed by the preeminent photographers of our time; and a collection of extraordinary portrait drawings beginning with a luminous watercolor self-portrait by Mary Cassatt.

The Director's Circle, the first formal group of individual donors, was successfully created to bring a broad range of supporters together in an organized manner to support the Gallery's programs. In addition, an NPG Council is being planned to broaden the base of support by opening doors to foundations, corporations, and individuals on a national and international basis. The Gallery appreciates the funds it received this year from the Smithsonian's Center for Latino Initiatives, Educational Outreach Fund, Scholarly Studies Program, and the Special Exhibitions Fund; *American Heritage Magazine*, The Morris and Gwendolyn Cafritz Foundation, The J. Paul Getty Trust, Home Box Office, J.M. Kaplan Fund, Thomasville Furniture Industries, Inc., the *Washington Post*, the *Washington Times*, and WBIG-FM.

The Education Department received a major grant to develop, implement, and evaluate an expanded menu of outreach programs for our Washington, D.C., metropolitan area and national audiences. A series of 48 living history performances drew a combined audience of 3,230, and Hispanic Heritage Month programs featured a series of panel discussions and a series of U.S.-made Latino films, shorts, and documentaries. Close to 3,000 visitors enjoyed the varied sounds of July's Courtyard Concert series, "The Age of Elvis: The Roots of Rock & Roll." Visits to NPG's award-winning Web site averaged approximately 180,000 per month. More than 4,000 digital images now accompany records on the newly implemented Collections Information System with various scanning projects in progress.

The Charles Willson Peale Family Papers submitted final page proofs and index to Yale University Press for volume 5 of the *Selected Papers of Charles Willson Peale and His Family, The Autobiography of Charles Willson Peale*. Publication is scheduled for spring 2000. Plans for volumes 6 and 7, to be comprised of selected letters and documents from the children of James and Charles Willson Peale, have been approved by the Advisory Board.

## National Postal Museum

*James H. Bruns, Director*

The National Postal Museum, through its collection and library, is dedicated to the preservation, study, and presentation of postal history and philately. The museum uses research, exhibits, education, and public programs to make this rich history available to a wide and diverse audience.

### Remembering a Titanic Year

Since opening its doors in July 1993, the National Postal Museum has continued to work vigorously to improve its exhibits, exploring new, innovative methods for interpretation. The museum prides itself on its development of engaging and informative public programs, and interactive digital exhibitions for the Internet to expand the scope and reach of our exhibitions. The National Postal Museum regularly par-



ticipates in both national and international philatelic and postal events. In Fiscal Year 1999, the staff of the National Postal Museum combined the energies and talents of its entire staff for a yearlong series of events, exhibitions, public programs, and on-line exhibits dedicated to telling the powerful story of the RMS *Titanic*. The official name of the great ship that could not be sunk was Royal Mail Ship *Titanic*. The great disaster claimed the lives of five sea post clerks as well as six million pieces of mail. Fiscal Year 1999 was truly a *Titanic* year for the National Postal Museum.

The National Postal Museum was invited to exhibit "Posted Aboard RMS *Titanic*" at two venues in Melbourne, Australia from March through June 1999. "Posted Aboard RMS *Titanic*" marked the museum's first traveling exhibition and was seen by more than 250,000 visitors in Melbourne as part of the "Melbourne 99" international philatelic exposition. The exhibition was later installed in the Postmaster's Gallery at the Australia Post in Melbourne. In May, "Posted Aboard RMS *Titanic*" was featured in San Antonio, Texas, at the National Postal Forum in conjunction with the American Postal Workers Union.

Following these events, the museum installed and opened the complete "Posted Aboard RMS *Titanic*" at the National Postal Museum on September 17, 1999. The expanded exhibition featured large-scale murals of the ship, an exploration of sea post mail service, and paintings of the five sea post clerks who perished while attempting to save *Titanic's* mail. The highlights of the exhibition were the extraordinary objects removed from the bodies of the clerks recovered at sea. These included Oscar Scott Woody's keys to *Titanic's* mail room and John Starr March's gold pocket watch eerily stopped at 1:27.

"Posted Aboard RMS *Titanic*" was kicked off with a spectacular gala event with the museum's supporters, leaders of the mailing industry, and leaders from the U.S. Postal Service. Educational and public programs, an interactive digital exhibition, and special tours carried this important story to an exceptionally broad audience. The exhibition is expected to travel to Smithsonian Affiliate museums in the future.

In addition to the concentrated effort on the *Titanic* exhibitions, the National Postal Museum installed three other major exhibitions. On October 6, 1998, "As Precious As Gold," documenting the role of the Post Office during the 1896 Alaskan gold rush opened to the public. Immediately following this, "Mayhem by Mail," exploring the world of postal inspectors and crime in the mail opened on October 16. Finally, in January, "Down With the Frauds!," featuring a rare collection of revenue stamps used to regulate adulterated foods opened in the museum's Rarities Gallery.

### Collection Management

The 13-million-object collection of the National Postal Museum is selectively expanded each fiscal year. In accordance with the collecting policy, the museum acquires rare or significant United States and international philatelic and postal history objects and routine amounts of U.S. stamp material from the U.S. Postal Service, Bureau of Engraving and Print-

ing, and U.S. Fish and Wildlife Service. In Fiscal Year 1999 the museum acquired a rare example of the first adhesive postage stamp on cover (the 1831 Greek 40-lepta charity tax or postage due issue). And special emphasis was placed on obtaining *Titanic*-related material for the exhibition "Posted Aboard RMS *Titanic*."

Collection Management's agenda targets every aspect of object care: research, retrieval, and distribution of object-related data and images; object storage, shipping, and accountability; preservation and treatment; and observance of the legalities of custodianship over acquisitions and loans. Continued goals of the department are the greater accountability, utilization and visibility, and better long-term care of the collection.

In Fiscal Year 1999 the museum began its first cooperative project with a Smithsonian Affiliate, The Women's Museum: An Institute for the Future, located in Dallas, Texas. Staff worked with contracted facilitators to select museum objects suitable for that museum's inaugural exhibition.

More specialized collections became the focus of cataloging and rehousing efforts. Work continued on rehousing the extensive U.S. certified plate proof collection. And with financial support from the Center for Latino Initiatives, early Honduran airmail proofs and overprinted postage stamps were linked to accession records, described and archivally housed for future research use. Specialized collections of mid-nineteenth to early twentieth-century Salvadoran philatelic objects were also professionally conserved and archivally rehousing.

With a commitment to expanding and better utilizing object information, the Collection Management Department contracted for the installation of the relational database, The Museum System (edition 9.1). This system of related information modules will allow multiple users to access, update, and create information about every aspect of object and object-related activities. It also promises a future for public accessibility. Approximately 60,000 records were converted to Access format for final conversion into TMS records.

The lengthy assessment and stocking of the U.S. stamp collection continued. This project, which ultimately intends to build complete Master, Reference, and Exhibit collections, has a short-term goal of producing a new U.S. stamp exhibit. In this period, one quarter of the exhibit material was assembled.

Department staff led a museum committee to assess the need for collections supplementary to the Registered Collection and to create standards and definitions for their management. An eight-page draft, completed by Collection Management staff, proposed definitions and policies to address educational collections, exhibit props and nonaccessioned collections. This draft will be attached to the museum's revised Collection Management policy.

### Education Department

The Education Department successfully attracted larger numbers of visitors to our public programs, to hands-on days

in the Discovery Center, and to our curricula publications than ever before. We reached out to two traditionally underserved constituent groups: pre-kindergarten students and the self-guided visitor. For pre-kindergarten children (ages 2–4), we developed a fanciful story-tour entitled “Let’s Deliver Mail.” Using a felt storyboard, students follow the mail delivery adventures of three characters (a Little Letter, a Pretty Postcard, and a Big Package). They learn about a letter carrier’s job, don mailbags to pick up and deliver mail to Owney the Dog in the museum’s atrium. To serve self-guided visitors, we created colorful, laminated self-guides that craftily invite the visitor to learn in every gallery.

The Education Department’s other highlights for the year included continuing docent training classes who in turn, conducted literally thousands of tours for the public. The Education Department developed and hosted more than 20 engaging and interactive programs and lectures for visitors covering a wide range of postal history and philately. A new style of hands-on Discovery Center day was created with monthly themes, drawing an average of 50 visitors each two-hour session. Among the many public program offerings of the Education Department were a lecture and slide presentation about the “Letters of Van Gogh” in January and the “Boys and Girls Club Absolutely Incredible Kids Day” in March where visitors wrote letters to homeless children that were particularly touching.

The Graceful Envelope Contest enjoyed another successful year with Nature as the contest theme for Fiscal Year 1999. Seventy-five winning envelopes were selected from the entries and displayed in a special exhibition from May to October. Similarly, the second Folk Art Mailbox Contest attracted many entries with photographs of five winning mailboxes displayed in the museum.

The Education Department continued its strong outreach efforts by distributing the “Classroom in a Can Lesson One: Cuneiform” to more than 1,000 Title I schools nationwide. In addition, the demand for Education Department publications remained constant. The Education Department distributed 1,603 *Postal Pack for Elementary Students*, 542 *Pen Friends*, 611 *Secondary School Postal Packs*, and 1,000 *Letters From Home* publications.

## National Zoological Park

### Michael H. Robinson, Director

The mission of the National Zoo, established by Congress in 1889 as a Smithsonian bureau, is to encourage the advancement of science and the education and recreation of the people. The Zoo is carrying its founders’ visions into the new Millennium and positioning itself to respond to the looming biodiversity crisis.

When Director Michael Robinson arrived in 1984, he envisioned transforming the Zoo into a “biopark,” where basic biology and conservation concepts could be explained by drawing examples from the best elements of zoos, botanic

gardens, and natural history museums. He also saw an opportunity to cross-reference other Smithsonian museums where exhibits relate to themes one might encounter at the Zoo. Now, Robinson’s concept is embodied in many popular exhibits, including the recently opened American Prairie.

### American Prairie Exhibit Opens

American Prairie, located along Olmsted Walk, opened on July 8. Two bison, numerous prairie dogs, and native plants introduce the prairie’s delicate ecological system. Reflecting the prairie theme, the bison shelter is reminiscent of the Great Plain’s sod-roofed barns.

### Montali Research

An article by Dr. Richard Montali, chief of the National Zoo’s pathology department, and Dr. Laura Richman, Johns Hopkins School of Medicine, was published in the February 19, 1999, issue of *Science*. The article explained how the death of Kumari, the National Zoo’s Asian elephant calf, led them to discover two new herpesviruses believed responsible for at least ten Asian and African elephant calves’ deaths in North America since 1983. It also points to solutions for successfully treating calves that contract the viruses. Thanks to Montali’s and Richman’s work, veterinarians successfully treated a similar infection using the drug famciclovir on a calf at a zoo in Springfield, Missouri.

### Frog Fungus Identified

The *Journal of Veterinary Diagnostic Investigation* published a report by Don Nichols, NZP pathologist, describing an unusual skin disease he first observed in 1991 in a research colony of California toads. Nichols later found similar cases in two of the Zoo’s White’s tree frogs and an ornate horned frog. He has also seen the disease in many of the Zoo’s young poison arrow frogs and in wild frogs from Arizona to Quebec.

Joyce Longcore, a world expert on fungi, identified the unique organism causing the disease as an aquatic fungus in the phylum Chytridiomycetes—the only fungus group that produces spores with flagella. In *Mycologia*, Longcore and Nichols named this new genus and species *Batrachochytrium dendrobatidis*.

Nichols is now certain that the organism is responsible for the disease. He and Zoo biologist Elaine Lamirande note that fungal spores are attracted to keratin, present in frog skin and in the mouth of tadpoles, and that the fungal cultures prefer temperatures below 26° C. Nichols and Lamirande hope these clues will help develop techniques to combat the disease.

### ELIPSE

The Zoo and its Conservation and Research Center, along with the National Museum of Natural History and the Smithsonian Environmental Research Center, have collaborated with the Institute for Conservation Biology to bring the Smithsonian’s resources to the Miami Latino community.



Steven Monfort directs the effort, known as ELIPSE (Environmental Latino Initiative Promoting Science Education).

This project has forged a network between Smithsonian researchers and several Southern Florida organizations—the Zoological Society of Florida, the Miami Museum of Science and the Miami-Dade County Public School system.

### Hsing-Hsing's Health

Hsing-Hsing, the Zoo's giant panda, experienced serious health problems during the spring. For several years he responded to treatment for arthritis, but this spring, he experienced lethargy and appetite loss. When veterinarians anaesthetized him, the exam revealed incurable progressive kidney dysfunction. Hsing has responded to medication, but his long-term prognosis is not good.

### Panda Negotiations

Ben Beck, Devra Kleiman, and Lisa Stevens, three Zoo staffers with long-term panda involvement, traveled to China in late June to discuss details of an agreement that might bring new pandas to the Zoo. Zoo staff hope the Chinese will consider the Zoo's proposal because of its contributions to medical, behavioral, nutritional, and demographic wild panda studies. As of late August, the request is still under negotiation.

## Smithsonian Astrophysical Observatory

### *Irwin I. Shapiro, Director*

Headquartered in Cambridge, Massachusetts, the scientific staff at the Smithsonian Astrophysical Observatory (SAO) carries out a wide variety of research programs in astronomy and astrophysics, Earth and space science, and science education in close collaboration with the Harvard College Observatory (HCO). The combined staff now numbers nearly 300 scientists, with many holding joint appointments. Together, the two observatories form the Harvard-Smithsonian Center for Astrophysics (CfA) to coordinate related activities under a single director.

Research is organized in seven divisions, with an additional department devoted to science education. And, while both observatories retain their separate identities, the combined CfA staff actively cooperates, conducting programs of study among the following divisions and department: Atomic and Molecular Physics, High Energy Astrophysics, Optical and Infrared Astronomy, Planetary Sciences, Radio and Geoastronomy, Solar and Stellar Physics, Theoretical Astrophysics, and Science Education.

### Facilities

Observational facilities include the multipurpose Fred Lawrence Whipple Observatory (FLWO) on Mt. Hopkins in Arizona and the Oak Ridge Observatory in Massachusetts.

The major instrument on Mt. Hopkins is the multiple mirror telescope (MMT), operated jointly with the University of Arizona. Also located at the FLWO are a 10-m-diameter reflector to detect gamma rays, a 1.2-m imaging optical/infrared telescope, and a 1.5-m spectroscopic telescope; it also houses a 1.3-m optical telescope, operated by the University of Massachusetts and other partners, and an optical and infrared interferometer (IOTA), built in collaboration with the universities of Massachusetts and Wyoming and MIT's Lincoln Laboratory.

Major support facilities in Cambridge include a panoply of computers connected by a local area network, a central engineering department, a machine shop, a large astronomical library, design and drafting capability, and in-house printing and publishing services.

Special laboratories are maintained for the petrologic and mineralogic studies of meteorites and lunar samples, for the spectroscopy of atoms and molecules, and for the development of instrumentation, including advanced electronic detectors and atomic maser clocks. Major research endeavors include the development of a Submillimeter Array (SMA) (a joint project with the Institute of Astronomy and Astrophysics of Taiwan's Academia Sinica) on Mauna Kea, Hawaii, and the conversion of the MMT to a single-mirror telescope 6.5 m in diameter.

SAO instrumentation is also operating in space. For example, the ultraviolet coronagraph spectrometer (UVCS) conducts ongoing studies of the Sun's corona, one of a suite of experiments aboard the Solar and Heliospheric Observatory (SOHO) spacecraft launched in 1995. In addition, development of new instrumentation for other space missions led to two successful launches during the year—the Submillimeter Wave Astronomy Satellite (SWAS) in December and, in July, a similar successful launch and deployment of the Chandra X-ray Observatory.

Further, the Science Education Department conducts several programs designed to improve the teaching of precollege science and mathematics, partly through the use of examples from astronomy. These programs include the development of curriculum materials and videos, and the training of precollege educators.

Numerous facilities serving the general astronomical community are located at the CfA in Cambridge as well. The Institute for Theoretical Atomic and Molecular Physics, established in 1988 to attract and encourage talented graduate students to enter this field, emphasizes study of fundamental questions in atomic and molecular physics. Other services include the International Astronomical Union's Central Bureau for Astronomical Telegrams and the Minor Planet Center, both of which disseminate information on astronomical discoveries worldwide. The gateway for SIMBAD, an international astronomical computer database, is also located at the Cambridge site, as is Harvard's extensive collection of astronomical photographic plates, the largest in the world. In addition, on behalf of NASA, SAO operates the astrophysics data system (ADS), as well as the flight control center for AXAF and the AXAF Science Center—now renamed the Chandra X-ray Observatory and the Chandra

X-ray Center, respectively. And, SAO continues to provide guest observer facilities for investigators using the Roentgen X-ray satellite (ROSAT), a joint venture of Germany, the United Kingdom, and the United States.

### Research Highlights

The Chandra X-ray Observatory, one of NASA's "Great Observatories" and a landmark U.S. mission, was successfully deployed from the Space Shuttle in July 1999. SAO played a lead role in designing Chandra, and operates it from the Chandra Operations Control Center in Cambridge. Chandra has been orbiting Earth and is sending back a steady stream of spectacular X-ray images. SAO is also the site of the Chandra Observatory Science Center, which coordinates research of the space observatory, and receives and archives its data for the world's astronomical community.

The Submillimeter Wave Astronomy Satellite, designed by SAO for NASA, was launched from a Pegasus-XL vehicle on December 5, 1998, and began its routine operations. SWAS is the first spaceborne observatory to operate at submillimeter wavelengths and has been giving astronomers new clues to some old cosmic mysteries, including how stars—and their accompanying planets—are born. For example, SWAS discovered that large amounts of water seem to pervade the interstellar medium, with particularly copious amounts in the huge molecular clouds thought to be the incubators of newborn stars. By contrast, SWAS has so far failed to detect molecular oxygen in those same interstellar clouds.

SAO continued its leadership in solar studies in 1999. For nearly four decades, solar scientists have been puzzled by the fact that the high-speed portion of the solar wind travels twice as fast as predicted by theory, with some particles reaching velocities of 2 million miles per hour as they stream out of the Sun and wash over the entire solar system. Now, observations made with instruments built by SAO and flown aboard NASA's Spartan 201 spacecraft and the international Solar and Heliospheric Observatory have revealed a surprising explanation for this mystery: Magnetic waves propel the particles through the corona like surfboarders riding the crests of a cosmic sea. The Sun's outermost atmosphere, or corona, is an extremely tenuous, electrically charged gas that is seen from Earth only during a total eclipse of the Sun by the Moon, when it appears as a shimmering white veil surrounding the black lunar disk. Using ultraviolet coronagraph spectrometers on Spartan and SOHO to create artificial eclipses, SAO scientists detected rapidly vibrating magnetic fields within the corona that form magnetic waves that, in turn, seem to accelerate the solar wind. The electrical charges of the solar-wind particles, or ions, force them to spiral around the invisible magnetic lines. When the lines vibrate, as they do in a magnetic wave, the spiraling ions are accelerated out and away from the Sun. Indeed, SAO scientists believe there are magnetic waves in the corona with many different "wiggling periods," or frequencies. Thus, these waves can accelerate various solar-wind particles at different rates. For example, SAO researchers found,

surprisingly, that the heavier oxygen ions actually move faster than the lighter hydrogen ions.

The popular image of nascent planetary systems as thin, spinning pancakes of cosmic dust and debris may be changed by a new computer model that shows such disks are transformed into distinct rings once Pluto-like bodies form. By analyzing Hubble Space Telescope images of a suspected young planetary system recently discovered around the star HR 4796A, SAO scientists and their colleagues produced a computer model that suggests that rings around new planetary systems are common features. Indeed, the well-known Kuiper Belt of asteroids in our own solar system may be the residual remains of such a ring.

## Smithsonian Center for Latino Initiatives

### *Refugio I. Rochin, Director*

The Smithsonian Center for Latino Initiatives, established in 1998, has as its mission to advance knowledge and understanding of Latino contributions to U.S. history, culture, and society. In January 1999, the Board of Regents approved the establishment of the Smithsonian National Board for Latino Initiatives. In September 1999, the Regents approved the first members of the board, including representation from the academic, corporate, mass media, public, and nonprofit sectors. The board will provide advice, support, and expertise on Latino history, culture, art, and science and help develop the financial base for Latino initiatives at the Institution. National interest in Smithsonian programs on Latinos is strong, and opportunities for expanding activities on Latinos are improving. Staff at the center increased from four to nine to bolster the center's capacity for outreach, fund raising, training, Web site development, and research.

During its inaugural year, the center promoted dialogues with Latino-related museums, cultural centers, and academic programs throughout the United States and Puerto Rico. Partners in programming included the Smithsonian's affiliations programs in San Antonio, San Jose, and Miami, as well as the Inter-University Program for Latino Research (IUPLR), a national consortium of Latino studies centers. The center's summer workshop and research fellowships brought 20 scholars to the Smithsonian to work on projects and to learn from Smithsonian curators, researchers, and project managers. The center joined with the Argentine Embassy to honor Argentine archaeologist Alberto Rex Gonzales for his eminent contributions in natural history. He received the Smithsonian Bicentennial Medal from Secretary I. Michael Heyman. The center's director received the Partnership Award from the Hispanic Caucus of the American Association for Higher Education.

The center developed its Web site ([www.si.edu/latino](http://www.si.edu/latino)) with national links to major programs for research, education, and museum studies. The purpose of the Web site is to make available and known the riches of Latino history and culture and to advance communication, collaboration,

and network building among organizations serving Latino communities.

The Latino Initiatives Fund, administered by the center, contributed to more than 45 projects within the Smithsonian. Among them were “Arriba! The History of Aviation in Latin America” at the National Air and Space Museum; a photography exhibition on Los Angeles Latino communities, “El Nuevo Mundo/The New World,” at the Cooper-Hewitt, National Design Museum; and studies of Latino musicians and writers, business entrepreneurs, and religious image carvers (*santeros*) at the National Museum of American History. The National Museum of American History, National Museum of Natural History, National Portrait Gallery, and National Zoo received funds to develop educational programs for Latino youth and communities. Several cultural events by Latino artists, educators, and performers were part of the outreach.

The Latino music tradition is a major concern of the center and the core of a long-term initiative including exhibits, performances, and research. In 1999, the center and The Smithsonian Associates cosponsored “Música de las Américas,” an acclaimed series of performances and scholarly panels exploring the influence of Latin music on the musical and cultural heritage of the United States.

With the Smithsonian Institution Traveling Exhibition Service, the center produced the widely acclaimed exhibition “Americanos: Latino Life in the United States,” which will travel through the United States until 2003. In partnership with Time Warner, an exhibition sponsor, the center has developed a visitor brochure and a related poster exhibit for schools.

## Smithsonian Center for Materials Research and Education

*Lambertus van Zelst, Director*

The Smithsonian Center for Materials Research and Education (SCMRE) is the Smithsonian’s specialized facility dedicated to research and training in the area of conservation, analysis, and technical study of museum collections and related materials. Conservation and preservation research seeks to increase our understanding of the mechanisms that affect the preservation of materials in museum collections, in order to formulate improved exhibit, storage, and other use conditions, as well as to develop, test, and improve treatment technology. In collections-based research, objects from museum collections and related materials are studied to increase their contextual information value and address questions in archaeology, art history, etc. Several of these research programs are conducted in collaboration with other institutions, notably the National Institute for Standards and Technology (NIST) in Gaithersburg, and the Carnegie Institution of Washington.

The international collaborative research program on the applications of these techniques in Latin American archaeol-

ogy, coordinated by SCMRE and sponsored by the international Atomic Energy Agency (IAEA), concluded its second year with a successful workshop in Cuzco (Peru). SCMRE also cosponsored the Conference on Modern Trends in Activation Analysis hosted by the National Institute for Standards and Technology.

Research continued on historic and prehistoric technologies, on the preservation of natural history collections and the potential to recover molecular information from such collections, and on the mechanical and chemical properties of a wide variety of materials in museum collections and their implications on the preservation of objects in such collections.

This year, SCMRE and Santa Clara University in Santa Clara, California, agreed to develop joint programs in research, education, and outreach focused on the history of the California missions and aiming specifically at a Hispanic American audience. Initial research will examine production and distribution of ceramics at the California missions, and is intended to result in a variety of educational offerings, including exhibit programs and curriculum units for secondary schools.

SCMRE continued a series of education and outreach activities based on technical information obtained from studies of *santos*, objects of veneration art specific to the Hispanic American cultural traditions. This year the laboratory organized the exhibit “A Closer Look at *Santos/Una Mirada mas Profunda a los Santos*,” which had its first showing at the de Saisset Museum in Santa Clara, California. This bilingual exhibit, centered around four *santos* from the de Saisset Museum and the National Museum of American History, focused on aspects of materials and techniques and the scientific methodologies employed in the technical studies.

Continuing the offerings of its Research Libraries and Archives Conservation Training (RELACT) program, SCMRE this year organized, hosted, and conducted, in collaboration with the International Centre for the Study of the Conservation and the Restoration of Cultural Property (ICCROM), an intergovernmental organization based in Rome, Italy, a six-week international course on Preservation Principles for Paper-based Collections. This course, attended by 11 professionals from archives in countries in Africa, Asia, Australia, and Europe, integrated technical and managerial issues involved in the preservation and use of archival collections. An innovative, Web-based curriculum designed for this course will remain available and accessible for professionals worldwide, and serve in future offerings of similar courses in various regions in the western hemisphere.

SCMRE’s Archaeological Conservation Training Program continued to serve an audience of conservation professionals, archaeologists and museum collection care staff. A number of conservators and conservation students received practical training experiences at archaeological sites in Harappa (Pakistan), Copán (Honduras), and Aguateca (Guatemala). At the same time, archaeologists and archaeology students active in field schools at these sites, as well as local professionals in the cultural sector, received training in conservation and preservation principles for archaeological materials during

excavation and subsequent laboratory processing and storage, through demonstrations, workshops, and lectures.

## Smithsonian Environmental Research Center

*Ross Simons, Director*

The Smithsonian Environmental Research Center (SERC) is a major international research and education center dedicated to understanding the ecological dynamics and human impacts in land/sea interactions of the coastal zone. SERC carries out research from Prince William Sound, Alaska, to the Antarctic Ocean; and from the farmlands of the Chesapeake Bay watershed to the Mangroves of Central America.

SERC scientists recently published a series of journal articles on a 25-year study of stream discharges of materials from the Rhode River watershed. The studies, begun by Dr. David Correll, revealed in unprecedented detail the relationships between stream discharges and precipitation. Storms had an especially big effect on particulate materials in stream water. The establishment of a beaver dam on one watershed led to significant retention of nutrients. Unexpected long-term declines in discharges of silicate may reduce the growth of silicate-dependent phytoplankton, which help support the food chain in the Rhode River and Chesapeake Bay.

Drs. Gallegos, Jordan, and Neale received a three-year, \$510,181 grant from the U.S. Environmental Protection Agency (U.S. EPA) to become a pilot site in a network of long-term, intensively monitored coastal index sites. The Coastal Intensive Site Network (CISNet) is part of Phase II of U.S. EPA's Environmental Monitoring and Assessment Program (EMAP). CISNet is being established to provide a network of "outdoor laboratories" at which research and monitoring will be conducted to establish linkages between observed changes in environmental stressors and concomitant changes in ecological resources. The grant will allow SERC scientists to supplement ongoing measurements of nutrient fluxes from the watershed with new instrumentation to monitor estuarine optical properties, namely spectral absorption and scattering coefficients. Research to interpret the monitored data will focus on three areas: (1) research to interpret estuarine optical properties in terms of the concentrations of water quality parameters that are indicative of eutrophication and sediment pollution; (2) manipulative experiments to establish the response of *in situ* concentrations of water quality parameters to inputs of nutrients (both watershed discharge and atmospheric deposition) and particulate matter on event to interannual time-scales; (3) process level research to examine the effects of solar UV (and especially UV-B) radiation on nearshore plankton communities, as influenced by estuarine optical properties. The research is expected improve the environmental decision-making process, by establishing comparative mechanisms by which nutrient inputs by watershed discharge and precipitation affect trophic structure of an estuary, resulting in measurable

and interpretable variations in estuarine optical properties on multiple time-scales.

One SERC program investigates the harmful effects of solar UV-B radiation, which is intensifying worldwide. Dr. Patrick Neale and his colleagues showed that UV-B absorbing pigments in a common form of Chesapeake Bay algae (dinoflagellates) protect against damage to photosynthesis. This finding resolved a controversy about whether such "sunscreens" really protect single-celled organisms only a few thousandths of an inch in diameter. New SERC studies in the Chesapeake Bay, Gulf of Mexico and the Southern Ocean near Antarctica investigate effects of UV-B on the growth of aquatic bacteria. Such effects may influence global nutrient cycles.

Another SERC program examines the effects of global increases in atmospheric carbon dioxide. Dr. Bert Drake led the ongoing, long-term study of a scrub-oak forest at the Merritt Island Wildlife Refuge on Cape Canaveral, Florida. The research showed that the effects of the severe drought during 1998 were to some extent mitigated by increasing atmospheric carbon dioxide. Scrub oak exposed to a level of carbon dioxide that we expect to occur during the next century used water more efficiently and therefore continued to grow even at the height of the drought. In contrast, oaks exposed to normal ambient carbon dioxide were so severely stressed that their abilities to assimilate atmospheric carbon dioxide and to grow were severely repressed. These results confirm that at least some effects of rising atmospheric carbon dioxide have a positive effect on native species plant species.

SERC researchers directed by Dr. Jess Parker completed a 10-year study of development in local forests using an extensive network of plots in forests of different ages. The results show how forests change over time in structure, growth, and diversity. The way a patch of vegetation changes when left alone is an important component of how entire landscapes change—the other dominant component is change caused by external events, such as the disturbance by human modifications, by natural disasters, and by pests. One SERC forest was mapped in particularly great detail. A large cadre of volunteers helped map the large, canopy trees in a 43-hectare (107-acre) area around SERC's forest research tower. The detailed study provides insight on the main factors controlling how trees are distributed within the main type of forest in the SERC vicinity: the tolerance of moisture and shade and the effects of past human modifications to the land.

Parker has also extended his forest studies to include a broad survey of light transmittance patterns measured in tropical, subtropical, western conifer, and eastern deciduous forest canopies. This survey is showing the importance of developmental stage, forest type, and disturbance on how light is distributed in forests, and will likely have some implications for forest management.

Future studies of forests will be aided by SERC's recent development of a portable laser system for sensing forest canopy structure. The prototype system has been deployed both from the ground, carried by a person on a backpack, and from the air, supported by a helicopter. Such a system

has a potentially wide application in forest survey, experimentation, and management.

SERC's studies of forest ecology also extend to understory plants. One such plant, is *Arisaema*, commonly known in the United States as Jack-in-the-pulpit, a genus of woodland herbs common to the forests of both eastern North America and Japan. Each species is dioecious (with separate male and female plants), but individual plants experience sex changes during its growth process. Their vase-like flowers are used extensively by many species of insects, including herbivores, predators, parasites, fungivores, and detritivores. Recent studies by Dr. Ilka Feller have revealed similar patterns of sex-biased herbivory and community structure in North America and Japan. This study helps to understand how natural communities of organisms are organized and what factors control plant-animal interactions.

Another plant ecology study at SERC focused on orchids. Orchids are the most diverse family of flowering plants on Earth, and many species, particularly species of terrestrial habitats such as forests, bogs, and fens, have become endangered because of human activities. Development of restoration plans for threatened and endangered terrestrial orchids requires an understanding of the ecological relationships that exist between the orchids and the mycorrhizal fungi that they host. Particularly important is an understanding of the relationships between mycorrhiza and orchid seeds and seedlings, life history stages, which are difficult to study in nature. SERC scientists had previously developed a technique to study the germination of orchid seeds in nature. More recently they have used isolation techniques to develop a large collection of orchid mycorrhiza for use in laboratory and field experiments. Dr. Dennis Whigham of SERC and collaborators from Denmark, Oregon State University, and York University in the United Kingdom have recently used molecular, morphological, and physiological techniques to determine that most of the terrestrial orchids that they are studying host several different mycorrhiza. Seeds of several of the orchid species being studied germinate without orchid mycorrhiza, but they germinate faster when mycorrhiza are present. Seeds of other orchids will not germinate at all unless they are exposed to very specific orchid mycorrhiza. Perhaps most importantly, SERC researchers have demonstrated that orchid seedlings need to become infected with mycorrhiza very soon after germination in order for them to survive and grow. They are also finding that the spatial distribution of orchid mycorrhiza in nature is highly variable at very small scales. These results suggest that restoration plans, to be successful, will require a much greater understanding of the habitat requirements of orchid mycorrhiza. The SERC research to date has revealed for the first time the high level of complexity that exists between terrestrial orchids, their mycorrhiza, and the environments where both occur.

SERC's Invasion Biology Program, directed by Dr. Gregory Ruiz, continues to be the nation's leading center for research and analysis of biological invasions in coastal marine ecosystems. Currently, the transport of ballast water in commercial ships is the most important mechanism of species

introduction in the coastal zone, because it moves large numbers of planktonic larvae and micro-organisms from port to port across oceans. SERC is the home of the National Ballast Water Information Clearinghouse, which is developing a database of ballast water released by all ships arriving from foreign ports to all U.S. ports. The database will be used to determine patterns of ballast water delivery and compared to biological invasions in U.S. coastal waters. During the past year, SERC scientists completed an analysis of the history of biological invasions of Chesapeake Bay, providing the most detailed summary of introduced species for any region in the world. SERC experiments aboard oil tankers headed for Port Valdez, Alaska, tested ways to rid ballast water of potentially invasive species transported on ships.

This year there was a big success story for SERC exemplifying public-private partnership. Major corporate support was received from the Mills Corporation for SERC's outreach activities. Donations from the Mills Corporation supported SERC's first traveling school exhibition, "Tales of the Blue Crab." The exhibition illustrates the ecology of the blue crab and is directly tied to national science curriculum standards. The innovative exhibition was dedicated at a gala ceremony and reception held at the Institutions Arts and Industries Building in Washington. Smithsonian Provost Dennis O'Connor, SERC Director Ross Simons, and Victoria Jenkins of the Mills Corporation, corporate underwriter of the exhibition, addressed specially invited guests, who included members of the U.S. Congress and their staffs and Smithsonian benefactors. The exhibition will begin traveling to schools throughout the mid-Atlantic region in the fall of 1999.

The Mills Corporation also provided support for SERC's public lecture series "An Ecological History of the Chesapeake Bay." This well-attended lecture series featured both SERC's PI's and guest speakers who provided attendees a wealth of knowledge regarding the complex interrelation of cultural and scientific history on one of America's most important and cherished waterways.

## Smithsonian Tropical Research Institute

### *Ira Rubinoff, Director*

During FY 1999, the Smithsonian Tropical Research Institute (STRI) hosted more than 500 visiting scientists and students who joined the STRI scientific staff of 33 in their efforts to enrich our knowledge about tropical environments, biologically the richest on our planet.

Several STRI staff scientists, visiting researchers, and students initiated research programs at STRI's Bocas del Toro field station in Isla Colon on the Caribbean coast of Panama that was opened in FY 1998. STRI staff scientists Nancy Knowlton and Hector Guzman are conducting research on corals, Penelope Barnes is studying sea grasses and mollusks, and Candy Feller and Catherine Lovelock from the Smithsonian Environmental Research Center are studying mangroves. Anthony Coates and Jeremy Jackson, STRI

scientists, are continuing their work on the Panama Paleontology Project, which studies the 20-million-year history of the ecological and evolutionary consequences of the rise and closing of the Isthmus of Panama.

At another research site in Panama at Sardinilla, Colon, engineers from the Brookhaven National Laboratories of the Department of Energy, who participate in a collaborative project with STRI, McGill University, the University of Panama, and the Universidad Católica Santa María La Antigua, set up the equipment and conducted successfully the first test run of the FACE project (Free Air Carbon Dioxide Enrichment project) ring. The equipment, used for the first time in the tropics, was tested to determine how it responded to Panama's wet and dry season conditions. The FACE project aims to understand the consequences of future emissions of carbon dioxide in the atmosphere, particularly on the regeneration of forest. Due to the high costs of carbon dioxide that are released to simulate future emission levels, the continuation of this project will depend on securing funds for its future operation.

At Panama's Metropolitan Natural Park, visiting scientists Stephen Mulkey, Kaoru Kitajima, and Eric Graham, from the University of Florida, with Joseph Wright of the STRI staff used the canopy access system to study the effects of the atmospheric phenomenon of "La Niña" on tropical forest. As part of this experiment, they installed high-intensity lamps on the crowns of two trees to augment sunlight during cloudy and rainy periods. Their preliminary results indicated that tropical trees may be light-limited during part of the year. This would suggest that the increase in cloud coverage produced by La Niña could potentially have an impact on the carbon dioxide uptake of tropical forest.

STRI fellows Cameron Currie and Ulrich Muller with Ted R. Schultz, a curator of the Smithsonian National Museum of Natural History and researchers at the University of Toronto advanced our knowledge of the evolution of the mutually beneficial relationship between ants of the genus *Attini* and the fungus they cultivate as their sole food source. Their findings demonstrate that this relationship is extraordinarily complex and could be quite recent: Ants can acquire a new fungus from the wild or from different ant groups. They also discovered a highly specialized fungus that can attack the ants' fungal gardens, and another mutually beneficial relationship between the ants and actinomycete bacteria, which help maintain the ants' garden suitable for their fungal crop. This research was highlighted in the *New York Times* Science Section on August 3, 1999.

During FY 1999 STRI scientists, visitors, and students published the results of their studies in 203 scholarly publications. This included books such as *Tropical Forest Ecology: A View from Barro Colorado* (Oxford University Press: 1999) by staff scientist Egbert G. Leigh, Jr.; *A Paleobiotic Survey of Caribbean Faunas from the Neogene Isthmus of Panama* (Allen Press: 1999), a collection of papers edited by visiting scientist Laurel S. Collins and Anthony G. Coates, STRI; and *Peces del Pacífico Tropical Oriental* (1998) by Gerard R. Allen and STRI scientist D. Ross Robertson, a Spanish translation

of a guide of Pacific fishes from the Gulf of California to the Galapagos, supported by a grant to STRI from the Smithsonian's W. Atherton Seidell Endowment Fund.

STRI-affiliated authors published three papers in *Science* and two in *Nature* and contributed to the diffusion of scientific knowledge through the publication of a bilingual guide (Spanish-English) on *The Amphibians of Barro Colorado Nature Monument, Soberanía National Park and Adjacent Areas* (1999) by Roberto D. Ibáñez, A. Stanley Rand, and César A. Jaramillo. This guide is also accompanied by STRI's first CD, which includes frog vocalizations produced by the same authors, in conjunction with Michael J. Ryan, visiting scientist from the University of Texas at Austin. Another major publication aimed at non-scientific audiences produced this year was *La Cuenca del Canal: Deforestación, Urbanización y Contaminación*, edited by Stanley Heckadon-Moreno, Roberto D. Ibáñez, and Richard Condit (STRI: 1999). This publication was the summary of a three-year environmental monitoring study of the Panama Canal Watershed, conducted by STRI, affiliated with Panama's National Environmental Authority (ANAM), and funded by the U.S. Agency for International Development (AID).

Another major accomplishment of the year was STRI's signing the five-year agreement with Panama's National Environmental Authority (ANAM) that permits STRI-affiliated scientists to carry out a project designed to link conservation of Panamanian biodiversity with bioprospecting for novel products for medicine and agriculture. This project, which will be conducted jointly with laboratories at the University of Panama and Panama's Ministry of Health, developed from basic information on tropical forest trees and insects produced by studies at STRI's field station on Barro Colorado Island. Funding for the project was provided by the National Institutes of Health through a competitive grant process of the International Cooperative Biodiversity Groups (ICBG) program.

In addition to providing opportunities for research in the tropics, STRI promotes training in its research areas. During FY 1999, STRI hosted two undergraduate field programs, with Princeton and McGill Universities, as well as held its annual field course for University of Panama students from July 18 to 26 at STRI Gigante Peninsula, a part of the Barro Colorado Nature Monument. For the first time this year, STRI cosponsored a six-week intensive eco-tourism guide training course with the local tourism industry and the U.S. Agency for International Development. Many STRI scientists participated along with international and local instructors in this course from April 19 through May 28, which responded to Panama's Tourism, Conservation and Research (TCR) Action Plan, designed to develop a sustainable tourism industry.

STRI continued its outreach efforts in FY 1999, with the presentation of the traveling exhibition "Our Reefs: Caribbean Connections" in Belize, City, Belize, during the month of November. STRI's exhibition "Parting the Green Curtain," which explains how the isthmus of Panama and STRI research has contributed to the development of tropi-

cal biology, was on view at the Costa Rican National Museum in June 1999.

STRI's major administrative accomplishment in FY 1999 was the designation in 1998 of six transition committees integrated by 34 STRI employees to handle diverse aspects of the changes in STRI's employment systems and administration procedures that were necessary to comply with the Panamanian legislation when the Panama Canal Treaties ended on December 31, 1999. The committees included a transitions committee, procedures, policies and operations committee, human resources committee, human relations committee, communications committee, and evaluations committee. This effort was directed by Leonor Motta, executive officer; Anthony Coates, deputy director; and Monica Alvarado, transition coordinator. Several activities for STRI employees were organized by the Human Relations committee through the year, which included a column on employee accomplishments in the STRI newsletter, a series of talks on STRI work and activities at Culebra Exhibits Center, Cerro Juan Diaz, and a trip on the STRI research vessel, the *R.V. Urracá*.

After successfully leading the STRI transition process, Leonor G. Motta retired on August 31 as STRI's executive officer, after being at this position for 15 years. Natacha Chandler was hired in July 1999 as STRI's new in-house attorney. Eileen Jones, associate director for grants and administration for the STRI development office in Washington, D.C., retired in January 1999. One of STRI's first staff scientists, Neal G. Smith, who had come to work as a biologist for the Canal Zone Biological Area in 1963, retired in December 1998 and was appointed scientist emeritus in January 1999. Staff scientist Robin Foster resigned to accept an endowed, full-time position at the Field Museum in Chicago. He will continue affiliated as a research associate, collaborating with STRI's Center for Tropical Forest Science. I. Fang Sun, professor at Tunghai University in Taiwan, was selected as the Asia Program Coordinator for STRI's Center for Tropical Science. On September 30, 1999, STRI had 192 employees, who actively contributed to its mission of conducting and facilitating tropical research.



# Reports of Education, Museum, and Scholarly Services

## National Science Resources Center

*Douglas M. Lapp*

The National Science Resources Center (NSRC), established in 1985 and operated jointly by the Smithsonian Institution and the National Academies (including the National Academy of Sciences, the National Academy of Engineering, the Institute of Medicine, and the National Research Council), works to improve science education in the nation's elementary and secondary schools. In addition to developing science materials for classroom use, the NSRC collects and disseminates information about exemplary science teaching resources and sponsors outreach activities to help school districts develop, implement, and sustain inquiry-centered science programs.

The NSRC's reform strategy begins with the assumption that informed leadership at all levels is critical in developing and implementing a new vision for science education reform. The NSRC conducts leadership development institutes to help identify and develop effective leaders within school districts and their local communities. It also provides ongoing technical assistance to catalyze and maintain science education reform efforts.

The NSRC's mission is to—

- Develop effective teaching materials for precollege science education.
- Collect and disseminate information on science teaching resources.
- Develop informed leaders to spearhead local, regional, and state science education reform efforts.
- Provide technical assistance to help school systems improve their science programs.
- Create networks of individuals and organizations that will promote the exchange of knowledge and experience useful to the improvement of science education.

During fiscal year 1999 the NSRC focused mainly on science curriculum development and outreach efforts. In the area of curriculum development, work on the first four modules in the Science and Technology Concepts for Middle Schools (STC/MS) curriculum reached completion. These modules are unique in they have undergone an extensive, two-year research and development process. Nineteen sites were involved in the national field testing of these modules during the past year. The feedback from the teachers, students, parents, and technical reviewers provided direction for the curriculum developers to refine these materials and ready them for commercial use.

Also in the area of curriculum development, the NSRC published the final STC Discovery Decks. These are illustrated sets of resource cards that expand on the Science and Technology for Children (STC) elementary units for fourth through sixth grade. Their completion brought to a close the STC elementary curriculum project.

Second, the NSRC's Leadership and Assistance for Science Education Reform (LASER) initiative made significant contributions to helping school districts reform their K-8 science programs. As one of the National Science Foundation's three Science Education Implementation and Dissemination Centers, LASER is a huge outreach initiative. During the past year, 375 school districts participated in 18 LASER events in the eight LASER regions across the country.

Third, the NSRC's Information Dissemination division provided unique electronic tools to help these projects meet their goals. For instance, staff set up a password-protected, Internet-based bulletin board to provide a forum for the exchange of ideas by the STC/MS field-test teachers. Information Dissemination staff also began work on a LASER Implementation Guide, following a national survey of school districts participating in NSRC science education reform efforts, to provide LASER participants with information on how to implement an effective science education program.



## Office of Exhibits Central

*Michael Headley, Director*

The Office of Exhibits Central (OEC) is one of the Smithsonian's largest and most comprehensive exhibit producers, providing high-quality products and services to nearly every museum, research institute, and office at the Institution. This year, OEC performed consulting, design, editing, graphics, modelmaking, fabrication, object handling, crating, and installation and deinstallation services for more than two dozen Smithsonian clients and affiliates. Assisting staff in the execution of these responsibilities is OEC's Administrative Unit, which offers management oversight and administrative and computer support.

### Consultation

Consulting services are a growing and important component of OEC's work. Sharing their expertise with Smithsonian clients, Smithsonian Affiliates, and outside organizations, OEC staff have helped define the content, execution, and even feasibility of several proposed exhibitions over the past year. Among these are "Mammals on the Move" for the National Museum of Natural History (NMNH); "Looking Both Ways: Heritage and Identity for the Alutiiq People" for NMNH's Arctic Studies Center; "Piano 300" for the National Museum of American History (NMAH) and International Gallery (IG); "Make the Dirt Fly: Building the Panama Canal" for Smithsonian Institution Libraries (SIL); "Corridos sin fronteras: A New World Ballad Tradition," "Hannelore Baron: Works from 1969–1987," and "Exploring Garden Transformations, 1900–2000" for the Smithsonian Institution Traveling Exhibition Service (SITES); and a planned exhibition at Wyoming's Cheyenne Cultural Center, a Smithsonian Affiliate.

### Design, Editing, and Graphics

Among the SITES exhibition projects in which the Design, Editing, and Graphics Unit participated are "On Miniature Wings: Model Aircraft from the National Air and Space Museum," "Creativity and Resistance: Maroon Cultures in the Americas," "This Land Is Your Land: The Life and Legacy of Woody Guthrie," and the refurbishment of "Full Deck Art Quilt," "Barn Again," and "Women in Flight." The Unit also worked on "Microbes: Invisible Invaders, Amazing Allies" for IG; and "Vanishing Amphibians" (Spanish-language version) for the Smithsonian Tropical Research Institute (STRI).

Staff prepared presentation sketches for a proposed new exhibit on farming at the National Zoo, and provided editing services associated with the refurbishment of the Star-Spangled Banner for NMAH.

The Unit provided long-term design consultation for Smithsonian senior management. Working with SI organizations and an outside architecture-engineering team, an OEC-designer-led team developed interior and exterior signage for the Arts and Industries Building. The Unit also

implemented a donation box program for the National Air and Space Museum (NASM). The Unit furthered Secretary Heyman's Web site and digitization initiatives by offering consulting, editing, or content development expertise on several projects, including a proposed Web site for The Millennium Project, which would have demonstrated the range of the Smithsonian's holdings using the latest technologies; "Digilab: Digitizing at the Smithsonian," an NMAH exhibition that opened in fall 1999; and a series of building evaluation reports posted on the SI intranet (Prism) for the Office of Physical Plant.

### Modelmaking

OECs Modelmaking Unit continued its work on the life-size recreation of an Ainu traditional house (*chise*) and several figures for the "Ainu: Spirit of a Northern People" exhibition at NMNH. The renovation of the Rotunda was another high-profile NMNH project with the Unit's work comprising a new elephant diorama, taxidermy support, specimen collection from the African savanna, and sculpted bronze identification medallions for species and objects included in the diorama. "Communities in a Changing Nation: The Promise of 19th-Century America," a new permanent exhibition at NMAH, was a third major project, requiring mannequins, diorama work, and the creation of artificial fruits and vegetables.

During the year, the Modelmaking Unit also was responsible for design and fabrication of art deco metalwork for "The Jazz Age in Paris, 1914–1940," a SITES exhibition; recreated animals for a 505-million-year-old scene in the Canadian Rockies for "The Burgess Shale: Evolution's Big Bang," also for SITES; a full-size replica of the Good Brothers' "Guff," the world's first successful radio-controlled flying model, for "On Miniature Wings: Model Aircraft from the National Air and Space Museum"; 16 painted-foam microbe "critters" for "Microbes: Invisible Invaders, Amazing Allies"; and full-size interactives recreating the keys, striking mechanisms, and strings for the harpsichord, clavichord, and four pianos featured in "Piano 300."

### Fabrication

The Fabrication Unit's skilled craftspeople provided comprehensive services encompassing fine cabinetetry, crating, object handling and packing, and exhibition installation and deinstallation. Highlights of its work this year included exhibit vitrines for "Instrument of Change: James Schoppert Retrospective," which opened at the George Gustav Heye Center of the National Museum of the American Indian (NMAI); extensive casework for "This Land Is Your Land: The Life and Legacy of Woody Guthrie" and "Ainu: Spirit of a Northern People"; construction of the OEC-designed VIARC information desk at the Arts and Industries Building; installation of "Microbes: Invisible Invaders, Amazing Allies"; and faux finishing for a peddler's house and a Southern market in the "Communities for a Changing Nation" exhibition at NMAH.

## Miscellaneous Services

The Unit also provided various "spot services," including signage for the Smithsonian Craft Show, new donor plaques for the James Smithsonian Society, custom lettering for a historic aircraft undergoing renovation at NASM's Garber facility, redesign of the Unsung Hero employee pin, kiosks for the Horticulture Services Division display at the Atlanta and Newport, Rhode Island, flower shows, and support services and signage for the new Affiliations program's annual Roundtable.

## Outreach and Training

Modelmaking staff conducted a Summer Workshop for Teachers organized by the Smithsonian Office of Education and provided training in mold making of crabs for the Smithsonian Environmental Research Center.

## Office of Fellowships and Grants

### *Roberta W. Rubinoff, Director*

Support from the Office of Fellowships and Grants enhances the quality, quantity, and diversity of research conducted at the Smithsonian. Each year, nearly 800 students and scholars come from universities, museums, and research institutes throughout the United States and abroad to use the Institution's collections and facilities. The office manages centralized competitive internship and fellowship programs, as well as competitive grant programs that support Smithsonian staff research. This office also administers all stipend appointments offered by the Institution.

Eighty-four awards were offered to graduate students, predoctoral students, and postdoctoral and senior scholars through the Smithsonian Fellowship Program. The individuals conducted independent research in fields actively pursued by the Institution, utilizing the collections and facilities. Through the office's minority internship programs, 38 students came to study and participate in ongoing research or other museum-related activities. Forty-six grants were made through the office's competitive grant programs for Smithsonian staff.

Among this year's fellowship recipients are Jorge Duany of the University of Puerto Rico and Mark Ferris from the State University of New York at Stony Brook. Dr. Duany's research focused on the construction and representation of cultural identities in Puerto Rico and the diaspora, working at the National Museum of American History with Marvette Perez, curator in the Division of Cultural History. He was a senior fellow in the Latino Studies Fellowship Program, which broadens and increases the body of Latino-related research. Mark Ferris was a Smithsonian Institution Predoctoral Fellow at the National Museum of American History with Lonn Taylor. His research explored the historical and symbolic significance of "The Star-Spangled Banner." This work will expand the understanding of national iden-

tity and the evolution of patriotism in the United States as reflected in the debates that raged over the national anthem.

Through the Scholarly Studies Program, Christraud Geary, curator of the Eliot Elisofon Photographic Archives at the National Museum of African Art, is leading a project which looks at the representation of African art in modernist photography. This research will increase the understanding of the relationship of Primitivism to that of modern art.

## Office of International Relations

### *Francine C. Berkowitz, Director*

As the Smithsonian's liaison with individuals and institutions abroad, as well as with international organizations and government foreign affairs agencies, the Office of International Relations (OIR) fosters the Institution's position as a global center for research and education.

This year, OIR staff represented the Smithsonian at the scholarly community in a number of official meetings and consultations, including State Department and U.S. Information Agency discussions about changes in the rules governing cultural exchange with Cuba; a World Bank-Organization of American States symposium on the preservation of cultural heritage in Latin America; and meetings of the Inter-American Biodiversity Informatics Network. The office was also involved in visits to Washington by scientific, cultural affairs, or museum officials from Belize, Burma, Bangladesh, Colombia, Costa Rica, Germany, Haiti, Iran, Luxembourg, and Peru.

The office coordinated an Institution-wide project to develop an exhibition and symposium commemorating the bicentenary of Felipe Poey in early 2000. This pioneering Cuban biologist, an early friend and correspondent of the Smithsonian, was one of the first naturalists to develop a concept of biodiversity.

Foreign officials who visited the Smithsonian this year included the president of Colombia, the queen of Jordan, the president of Ecuador, the first lady of China, the queen of Bhutan, and the president of Panama. For the visit of Cuba's vice-minister of culture, OIR organized a briefing by representatives of 25 Smithsonian units. OIR handles arrangements for visits such as these and serves as internal adviser on foreign affairs and the Smithsonian's interests abroad. In cooperation with the State Department and Smithsonian staff, OIR also organizes briefings on environmental affairs for newly confirmed ambassadors before they take up their posts abroad.

## Office of Sponsored Projects

### *Ardelle G. Foss, CRA, Director*

The Office of Sponsored Projects served Smithsonian researchers and scholars by supporting the work of approxi-

mately 167 principal investigators by submitting 258 new proposals valued at \$85.3 million and by negotiating and accepting for the Institution 211 grant and contract awards valued at \$40.4 million.

## Asian Pacific American Studies Program

*Franklin Odo, Director*

The APA Program seeks to integrate Asian Pacific American contributions to U.S. history, culture, art, and society through Smithsonian collections, research, exhibitions, and programs. It also serves as the principal portal through which the extremely diverse Asian Pacific American communities can provide input into the Institution. During FY 1999, the Asian Pacific American Studies Program made great strides in establishing itself in the Asian Pacific American communities in the Washington, D.C., area and nationally.

The Program's most significant achievement with the local community was the mounting of the exhibition, "From Bento to Mixed Plate: Americans of Japanese Ancestry in Multicultural Hawai'i." The APA Studies Program partnered with the Los Angeles-based Japanese American National Museum to bring this traveling exhibition to the Arts and Industries Building for six months. To bring the exhibition to life, the APA Studies Program worked closely with local community groups to recruit over 100 volunteer gallery guides and artists to demonstrate art forms reflecting Hawaii's multicultural heritage. Gallery guides provided visitors with a memorable experience by sharing their personal stories about multicultural Hawaii. On Saturdays, visitors participated in crafts such as raku pottery, origami, and lauhala leaf weaving.

This exhibition made an impressive impact on the Washington, D.C., Asian Pacific American community and greatly benefited visitors. Between May 23 and August 15, Bento gallery guides logged more than 1,400 volunteer hours. During the summer months (June, July, and August), more than 700 visitors participated in weekend arts demonstrations.

On the national front, the APA Studies Program worked with Asian Pacific American leaders around the country to identify priorities for a strategic plan. More than 45 scholars, directors of arts organizations, and civic leaders participated in the process. Inviting these opinion leaders into our strategic planning process not only familiarized them with the breadth of Smithsonian's activities, but also helped make Smithsonian more relevant to their communities around the country.

APA Director, Franklin Odo, made regular site visits to centers of APA communities including Seattle, Washington, northern and southern California, New York City, and Hawaii in order to inform leaders, groups, and potential donors of the opportunities unfolding for partnerships and affiliations.

## Smithsonian Early Enrichment Center

*Sharon Shaffer, Executive Director*

The Smithsonian Early Enrichment Center (SEEC) is a unique museum-based child development center, preschool, and kindergarten that takes advantage of the Smithsonian's invaluable resources. SEEC provides a model, high-quality educational program for young children in Smithsonian facilities and advances educational opportunities for all children by sharing its expertise on a national level, furthering the Smithsonian's educational mandate. The program serves 125 children at three Smithsonian sites and has more than 30 staff members.

This year, SEEC reached a new five-year agreement outlining its relationship with the Smithsonian. SEEC's board of directors issued a new strategic plan, *A Design for Our Future*, which outlines growth in financial planning, diversity, educational outreach, curriculum, and the SEEC-Smithsonian partnership.

SEEC advances its outreach mission through twice-yearly seminars for teachers and museum professionals from around the country and through partnerships with museums and educational institutions. Several schools and federal agency child-care centers currently license the SEEC curriculum, including a cluster of five preschools and several cultural institutions in Cleveland.

This year, Secretary I. Michael Heyman presented SEEC's founding executive director, Sharon Shaffer, with the Secretary's Gold Medal for Exceptional Service to the Institution, the first such award ever given to a Smithsonian educator.

## Smithsonian Affiliations

*J. Michael Carrigan, Director*

The Smithsonian Institution Affiliations Program is an innovative, collections-based outreach initiative that shares Smithsonian collections, staff expertise, and programmatic resources with communities nationwide. Affiliations offer museums an opportunity for long-term artifact loans and stimulate strong collaborations that can sustain other programs. More than 20 organizations currently participate in the program.

At the first annual Affiliations Program Roundtable, directors and staff members of affiliating museums learned more about the Smithsonian and addressed issues specific to their ongoing projects. This well-attended two-day conference was a positive forum for assessing projects, exchanging experiences, providing feedback, and generating networks among the affiliates.

In the past year, seven organizations have fully implemented their affiliations with the long-term loans of objects from the national collections: B&O Railroad Museum (Baltimore, Maryland), Bisbee Mining and Historical Museum (Bisbee, Arizona), Kansas Cosmosphere (Hutchinson,

Kansas), Mexican Heritage Plaza (San Jose, California), Miami Museum of Science (Miami, Florida), National Museum of Industrial History (Bethlehem, Pennsylvania), and San Carlos Institute (Key West, Florida). These additions bring the total number of implemented affiliations to nine.

The program welcomed six new participants during fiscal year 1999: B&O Railroad Museum, Florida International Museum (St. Petersburg, Florida), McAllen International Museum (McAllen, Texas), San Carlos Institute, Storytelling Foundation International (Jonesborough, Tennessee), and The Women's Museum: An Institute for the Future (Dallas, Texas).

As an extension of their affiliations projects, the Bisbee Mining and Historical Museum and Centro Alameda (San Antonio, Texas) each had interns working in Smithsonian offices during the summer. The Affiliations Program office also oversaw one fellowship this year.

## Smithsonian Institution Archives

### *Edie Hedlin, Director*

Improving internal systems and promoting outreach were the major goals in 1999 for Smithsonian Institution Archives. The National Collections Program (NCP) made significant progress in coordinating the Institution's revision of SD600: Collections Management Policy by securing the Board of Regents approval of "Smithsonian Collections Management Guidelines." The Archives Division began a multi-year project to implement a new system for describing its holdings. By adopting a method of using contextual descriptions, known as agency histories, combined with content descriptions of series of records, SIA will provide researchers with improved access to the hundreds of collections in its care.

The Electronic Records Program within the Technical Services Division developed advice for Smithsonian Institution staff that was placed on the Smithsonian's Intranet PRISM to assist them in managing their e-mail messages as the Institution upgraded its e-mail system. In response to perceived problems with insect infestations, the Preservation Team developed an integrated pest management program. The Joseph Henry Papers project entered into the Model Editions Partnership, a cooperative effort by documentary editing projects and the National Historical Publications and Records Commission to establish standards for efficient coding procedures for electronic publications.

A major effort to convert individual databases tracking various aspects of archival processes commenced in 1999. Staff from both the Archives Division and the Technical Services Division defined the fields required by the various activities and began the design of the Collections Management System. The ultimate goal is to incorporate all of this information into an integrated database that can share common information across archival functions.

The Institutional History Division (IHD) continued its vigorous schedule of publication in both printed and virtual

form, as evidenced by the issuance of volume 8 of *The Papers of Joseph Henry*. Staff from the Joseph Henry Papers provided the information that appeared in the Mini Page syndicated column, featuring Joseph Henry and his role in creating a weather reporting system in the United States. They also added three new articles on Henry's role in the history of American technology to its Web site. Other Web activities included the completion of the "Bairds's Dream: A History of the Arts and Industries Building" electronic exhibition, the initiation of a new Web resources that will offer public access to legal documents relating to the history of the Smithsonian, and the inclusion of the finding aid, "Field Reports of the United States Fish and Wildlife Service, 186-61" on the SIA Web site.

NCP compiled and published the Institution's annual collection statistical report. In June, the Provost approved the transfer of the production of the Smithsonian Annals from the Smithsonian Institution Press to NCP. During this first year, NCP staff began to gather information for the 1997 and 1998 Annals.

The focus for the Electronic Records Program in 1999 was on issues associated with electronic record keeping systems. SIA participated in a pilot project with the Archives Center to determine the feasibility of managing and preserving the Office of the Director's e-mail records by creating a parallel electronic system. SIA purchased electronic record keeping software to examine the feasibility of using this type of system for managing both paper and electronic files.

The Preservation Team focused its activities on addressing the core preservation needs of SIA by performing holdings maintenance on high-value collections, conducting preservation assessments of accessions and high-value collections, environmental monitoring of records storage facilities, preparing collections to National Underground Storage, and treating collections identified as containing mold. With funding from a research resources grant, the team members rehoused 215 archival collections comprising 941 cubic feet. A second project funded by research resources grant and the Women's Committee continued the work begun in 1998 of appraising, preserving, and making accessible the films and videotapes created by Smithsonian Productions. The team continued its practice of providing outreach services to the National Anthropological Archives, Hirshhorn Museum and Sculpture Garden, and the Archives of American Art.

The core archival activities continued with providing services to Smithsonian offices. SIA completed a survey of 1,400 cubic feet of records for the Cooper-Hewitt, National Design Museum, which culminated in a comprehensive records disposition schedule for that museum. The Archives Division coordinated the transfer of SIA records and those of other Smithsonian repositories to National Underground Storage in Boyers, Pennsylvania. By the end of 1999, over 6,400 feet of Smithsonian material had been moved to NUS. SIA transferred 559 cubic feet into its holdings and discarded 37 cubic feet. Total archival holdings at the end of 1999 amounted to 22,207 cubic feet of material. Staff brought in 364 cubic feet and discarded 310 cubic feet of records at the records center.

Finally, SIA posted a 27 percent increase in reference use of its holdings. There were 4,095 inquiries, which included daily visits, telephone, e-mail, and mail inquiries and charge-outs to Smithsonian units.

## Smithsonian Institution Libraries

*Nancy E. Gwinn, Director*

Expanding the variety and the volume of the information services it offers electronically, the Smithsonian Institution Libraries provided a wealth in information to Smithsonian researchers at their desktops. More full-text e-journals, six digital editions of rare books, and multi-subject reference-desk services were brought on-line to personal computers throughout the Institution and the world. Immediate beneficiaries of this growing body of electronic information made available by the Libraries were staff working in Smithsonian research laboratories and in the field on their laptops, in collection storage areas, in exhibits design studios, and in education offices. Recognizing the Libraries' reliance on and mastery of electronic resources and technology, Libraries' Director Nancy E. Gwinn established the Information Systems Division this year. Headed by Tom Garnett who was named Assistant Director and appointed to the Libraries' Executive Committee, the division manages the Electronic Library Program that includes all on-line products and initiatives, from publication of original electronic works and digital editions of rare books to delivery of information for research in e-journals. Illustrated rare books in natural history and the history of science and technology are now accessible as digital editions to a worldwide audience of book lovers, students, scientists, and bibliographers. Each digital edition carries historical background material prepared by Libraries' staff and subject specialists, which is valued by the researcher and book connoisseur alike. The on-line publication of digital editions has brought these texts to a worldwide audience while safeguarding the Smithsonian Libraries' collections for future generations by reducing the amount of handling of fragile materials. The Jaques Admiralty Law Firm and the Atherton Seidell Endowment Fund provided funding for the equipment. The SI Libraries' Imaging Center opened in March as a production unit where printed materials are scanned, casting images and text from paper-based materials into a digital format. At the March 2 opening of the SIL Imaging Center, attended by Provost Dennis O'Connor and members of the Libraries' Board, Director Nancy E. Gwinn said, "We cannot yet predict how these digital editions, which are destined to reach an audience worldwide, will be used in research. As new technologies enable us to move our collections off the Mall, it is clear the Libraries plays a crucial role in bringing students, scholars, and members of the public into the new information age with stunning works kept until now within the security of our rare-book libraries."

The Libraries' administration and its Board created the Spencer Baird Society in July. Named for the Smithsonian's

second Secretary, this annual giving and premiere donor-recognition society recognizes individuals who provide significant philanthropic support for top priority projects of the Libraries. Some possible uses of Baird Society funds are purchase of unusual or especially important rare books for the collections; acquisition of new equipment to support digitizing efforts for the collections; providing stipends for resident scholars, interns, or a minority postgraduate residency for a new librarian; cataloging a new collection; or conservation treatments of volumes at the top of the Libraries' conservation priority list.

The Smithsonian Institution Libraries opened its nineteenth branch at the National Museum of the American Indian Cultural Resources Center in Suitland, Maryland, in February 1999. The branch began offering full-time library services in June when a library technician joined the Libraries. The branch has a limited collection of materials from the curatorial offices and provides interlibrary loan services.

SIL now offers access to 320 e-journals to its Smithsonian library users. Journal literature in electronic format, or e-journals, as they are called, allows researchers to get to vast amounts of information directly from their computers. E-journals are invaluable because they allow libraries to make better use of their space and budgets while providing information to a wider audience than could be served on location in the branch libraries. (The number of e-journals published has grown significantly over the past five years.) New electronic education aids published by the Libraries published on [www.sil.si.edu](http://www.sil.si.edu) include *Anthropology on the Internet for K-12* (1999) by Margaret R. Dittmore, Librarian of the Anthropology Branch. The American Anthropology Association linked this useful K-12 guide to its home page. Offered as part of the larger Smithsonian effort to support education for diverse audiences, each section is illustrated with photographs of Smithsonian anthropologists working in the field or in their laboratories. *Modern African Art* (1998), an annotated bibliography of more than 350 published articles, reviews, catalogs, and books prepared by Janet L. Stanley, Librarian of the National Museum of African Art Branch, was published in 1998. Both the African art and the anthropology published guides are updated regularly. The Libraries' Web page is also home to "Library and Archival Exhibitions on the World Wide Web," a site with links to approximately 600 on-line exhibitions created by or related to libraries, archives, and historical societies. The site, which is maintained by Diane Shaw of SIL staff, received four national awards and was named the *USA Today Hot Site* in June. The Libraries' home page has Quick Reference links, and the 19 branch libraries each have home pages with subject-specialty information. The SIL User Guide and its newsletter, "Information," are available on-line along with application forms for its Resident Scholar Programs.

In 1999 the Libraries completed a multiyear project funded by the Getty Grant Program, creating approximately 25,000 on-line bibliographic records relating to the literature of African art and culture. Museum of African Art

Branch librarian Janet Stanley, author of the bibliographic index and principal investigator for the grant, began to compile the information in 1979, and she will continue adding records as new literature on African art is published. Ms. Stanley's work resulted in the addition of hundreds of new subject terms relating to African art and culture to the Getty's Art and Architecture Thesaurus, and the addition of more than 100 new subject headings used by the Library of Congress for cataloging. Since these 25,000 records of the African Art bibliographic index have been available with the Libraries' catalog on SIRIS ([www.siris.si.edu](http://www.siris.si.edu)), reference and interlibrary loan inquiries to the African Art Branch library have more than tripled.

The Smithsonian Institution Libraries is a key player in cooperative efforts that will benefit research at the Institution. As a member of the Chesapeake Information and Research Library Alliance, a consortium of nine libraries of which SIL is a founding member, a CIRLA task force is addressing the complex nature of contracts and licenses for access to information in a digital format and designing a model for user agreements with publishers of e-journals to negotiate cost savings and to expand access to published information. Smithsonian Libraries Director Dr. Nancy E. Gwinn is serving as chair of CIRLA 1999–2000. CIRLA members in addition to the Smithsonian Institution Libraries are the Library of Congress and the National Agricultural Library and several universities (Georgetown University, The George Washington University, Howard University, Johns Hopkins University, the University of Delaware, and the University of Maryland).

## Smithsonian Institution Traveling Exhibition Service (SITES)

*Anna R. Cohn, Director*

The Smithsonian Institution Traveling Exhibition Service (SITES) is the largest traveling exhibition service in the world. Its mission is to extend the Smithsonian collections, research, and exhibitions to "sites" across the nation and beyond. SITES organizes and circulates exhibitions of all shapes and sizes on the arts, sciences, and humanities. Since the first exhibition went on the road in 1952, SITES has traveled thousands of exhibitions for the education and enjoyment of museum-goers in every state and several foreign countries.

To expand the Smithsonian's outreach, SITES has continued to seek out alternative partners and spaces to create and host exhibitions. Presented at the International Gallery under the auspices of SITES, "Microbes: Invisible Invaders, Amazing Allies," an interactive, kid-friendly traveling exhibition that introduced the world of bacteria and germs using virtual reality, 3D animation, theatrical sets, and special effects was sponsored by Pfizer Inc. in collaboration with the National Institutes of Health and produced by BBH Exhibits, Inc. SITES also continues to work with the American

Library Association to create exhibitions for display in libraries across the country.

SITES' Museum on Main Street Program is designed to reach underserved communities in rural areas throughout the United States. In addition to providing these venues with exhibitions, SITES works with the Federation of State Humanities Councils to provide the venues with professional development programs and training, as well as assisting in the development of site-specific public programming. "Yesterday's Tomorrows: Past Visions of the American Future," is the third Museum on Main Street traveling exhibition and will begin touring in 2001.

America's Jazz Heritage (AJH), a partnership of the Lila Wallace–Reader's Digest Fund and the Smithsonian Institution, continues its mission to research, preserve, and present the history of jazz. AJH/SITES traveling jazz exhibitions have and continue to fulfill institutional visibility across the nation. AJH reached diverse audiences through informative and entertaining exhibitions focused on one of America's most treasured legacies, its history, icons, and priceless collections. AJH coproduced the distance learning program entitled "An Ellington Experience" free of charge in collaboration with the Cleveland Education Fund's Excellence in Music Initiative during the April 1999 Duke Ellington Youth Festival. AJH also coproduced "The Musical Genius of Duke Ellington," an Electronic Field Trip in collaboration with the Fairfax Network and the Cleveland Education Fund, which was broadcast free of charge to more than 8,000 schools and 2.8 million students.

Through the Smithsonian's growing Affiliations program, AJH is afforded heightened institutional support for creating partnerships and collaborations with jazz museum affiliates such as the American Jazz Museum in Kansas City, Missouri, and the emerging National Jazz Museum in Harlem.

## Smithsonian Office of Education

*Ann Bay, Director*

A yearlong strategic planning process culminated in the merger of the Smithsonian Office of Education (SOE) and the Center for Museum Studies (CMS). The new office interprets the collective knowledge of the Smithsonian and serves as a gateway to the Institution's education resources. It also promotes the understanding and use of museums in general. This expansion of mission began nearly three years ago when the Office of Elementary and Secondary Education became the Smithsonian Office of Education. The role of SOE broadened to include service to educators and parents and administration of the Educational Outreach Fund and the Wider Audience Development Program.

In the year leading up to the merger, SOE and CMS together offered professional development opportunities and services for educators. In the Washington area, summer seminars helped elementary and secondary teachers learn how to

use museum resources to meet curriculum objectives. The Paul Peck Humanities Institute, a partnership at Montgomery College in Maryland, provided faculty research fellowships, internships, and seminars. The office continued to promote the popular heritage-month programming at the Institution. This year, for example, a workshop for teenage writers conducted by prominent Afro-Latino authors was filled to capacity.

The office also brought Smithsonian expertise to places throughout the country. The American Indian Museum Studies Program conducted extensive seminars in Louisiana, Florida, and Alaska. Regional workshops in Riverside, California, and Austin, Texas, fostered partnerships between school districts, local museums, and the Smithsonian. In these community-based programs, the Smithsonian models methods and gives technical support.

The new *Smithsonian Field Trip Guide for Educators*, funded by several Washington-area foundations, was launched this year. This 96-page guide details tours and programs for students and professional development opportunities for educators at all Smithsonian museums, research institutes, and offices. An "educator's toolkit" section, developed with the cooperation of schoolteachers and some 60 Smithsonian contributors, contains proven educational strategies and a guide to making connections between the Smithsonian's permanent exhibitions and national education standards in history, science, and the arts.

## Accessibility Program

### *Janice Majewski, Accessibility Coordinator*

The number of people who have disabilities has been increasing as life spans lengthen. Today, one in five Americans has a disability. That translates into greater numbers of Smithsonian visitors with diverse abilities and disabilities. The Accessibility Program advocates for and coordinates actions by Smithsonian museums, research institutes, and offices to accommodate audiences that include people with disabilities. The program's activities this year demonstrate the diversity of the audiences and issues.

The program collaborated with the National Museum of American History and the National Rehabilitation Awareness Foundation to present "Disability and the Practice of Public History," a ground-breaking conference for scholars, museum professionals, and disability advocates. The participants concluded that disability history must be part of public narratives, including exhibitions. Integral to the success of the conference was the program's model provision of accessibility services to accommodate the 200 conference registrants with diverse disabilities.

Professionals from the Smithsonian and Washington, D.C., area cultural organizations attended five continuing education sessions held by the program, focusing on accommodations for visitors who are blind or have low vision. The topics were tactile opportunities in museums, site orienta-

tion and wayfinding, assistive technologies, the Mashantucket Pequot Museum's information system for visitors with vision impairments, and publications accessibility.

As Smithsonian visitors' demand for accessibility services increased, the program provided more than 550 hours of sign-language interpretation, audio description, and Real-time captioning services through its centralized resources. Review of design and construction plans for the accessibility of facilities and exhibitions is a priority. Significant projects this year included renovation plans for the National Museum of American Art and the National Portrait Gallery, the National Museum of the American Indian's museum on the Mall and its Cultural Resources Center, the Victor Building, and the Star-Spangled Banner Preservation Project conservation laboratory and exhibition.

## Institute for Conservation Biology

The Institute for Conservation Biology (ICB) continued its mission to facilitate multidisciplinary initiatives in conservation science by drawing together the myriad skills and resources of the Smithsonian Institution, collaborating with other organizations, and creating alliances that effectively address a broad range of conservation issues resulting from the biodiversity crisis. ICB continued to forge strong relations with non-Smithsonian agencies and nongovernmental organizations.

ICB and The World Bank cohosted an environmental roundtable for 35 participants from the host organizations, the U.S. and Ecuadorian governments, nongovernmental organizations, and foundations. Jamil Mahuad, president of Ecuador, spoke on "Ecuador's New Vision on Sustainable Development," followed by an open discussion. U.S. Secretary of the Interior Bruce Babbitt gave the concluding remarks.

Two distinguished guests were featured in ICB's ongoing Visiting Speaker Luncheon Series: Timothy Wirth, president of the United Nations Foundation, and Rosina Bierbaum, associate director for environment in the Office of Science and Technology Policy, Executive Office of the President. This series acquaints Smithsonian scientists and staff with the Institution's environmentally oriented neighbors and serves as a springboard for cooperative initiatives.

With the University of Maryland graduate program in Sustainable Development and Conservation Biology, ICB hosted the Society for Conservation Biology's 1999 annual meeting, "Integrating Policy and Science in Conservation Biology." The institute and The World Bank cosponsored a luncheon meeting with Ernesto Perez Balladares, president of the Republic of Panama, to discuss ecotourism and the need for strategic alliances among tourism, conservation, and scientific research. ICB continued to offer its course, "Biodiversity and Wildlife Conservation," at Johns Hopkins University's Washington, D.C., campus. Thirteen Smithsonian scientists taught the course during the fall 1999 semester.



## Institutional Studies Office

*Zahava D. Doering, Director*

The activities of the Institutional Studies Office (ISO) can be grouped into four major categories: museum and exhibition planning, exhibition assessment, membership studies, and research.

In museum and exhibition planning, the office conducted a major study of three linked museums—the National Museum of American Art, the National Portrait Gallery, and the Renwick Gallery—that was designed to provide essential data on visitors to guide planning. Data collection took place in different seasons to capture a wider range of visitors. For the National Air and Space Museum, the office conducted exploratory interviews with visitors to aid in planning the new Air Transportation hall, as well as surveys and in-depth interviews for the future “Explore the Universe” exhibition. At the National Museum of Natural History (NMNH), ISO interviewed visitors extensively in the Kenneth E. Behring Hall of Mammals to learn how they experience the displays. These explorations led to a large-scale survey study that yielded information to guide planning for the reinstallation of the hall.

Exhibition assessment activities included an in-depth study of the “Geology, Gems, and Minerals” exhibition at NMNH that provided valuable insights into how the museum could enhance attendance in its major exhibitions. At the National Zoo, a series of three studies investigated visitor behavior, attitudes, and experiences in the Amazonia exhibit, with a focus on the Amazonia Science Gallery and its use by families.

Two membership studies repeated and enlarged on studies conducted 10 years earlier. For the Cooper-Hewitt, National Design Museum, a study showed how the museum’s support has changed over time. A study for The Smithsonian Associates emphasized Internet use by members.

ISO’s research activities continued work on the types of experiences that visitors anticipate and find satisfying in

museums. A study of entering and exiting visitors at the National Museum of American History demonstrated the usefulness of this model in clarifying the museum’s impact on its visitors.

The peer-reviewed journal *Curator* invited the office to submit articles for a special issue on ISO’s work. Staff members prepared five major articles, which were accepted and scheduled for publication early in 2000.

## Scientific Diving Program

*Michael Lang, Scientific Diving Officer*

As an Institution-wide research support program dedicated to the safe conduct of underwater science activities by Smithsonian staff and affiliated researchers, the Scientific Diving Program facilitated projects and diving expeditions by the Smithsonian Tropical Research Institute, the Smithsonian Environmental Research Center, the National Museum of American History, the Smithsonian Marine Station at Fort Pierce, and the National Museum of Natural History. These projects involved more than 200 scientific divers and approximately 4,000 incident-free dives.

Program staff were involved in research diving expeditions in the Caribbean and the Pacific. The Scientific Diving Control Board chair and the scientific diving officer co-chaired a two-day marine sciences workshop at the Smithsonian Environmental Research Center that examined underwater research efforts at the Smithsonian and its network of marine research facilities. The program also conducted two three-week scientific diving courses, one at the National Museum of Natural History and one in Spanish at the Smithsonian Tropical Research Institute. At the invitation of the Japan Marine Science and Technology Center, the program was involved in the development of a scientific diver network and manual in Japan.



# Report of the Under Secretary

Constance Berry Newman

## A Core Commitment to Excellence

The public knows to expect excellence from the Smithsonian. Whether visiting a museum on the Mall, attending Smithsonian Associates events in their hometowns, or browsing the Web site, people are confident that they will have an experience of the highest quality. This dedication to excellence permeates the Institution, and not just in the visible programs that the public enjoys.

The reports in this section of the annual report highlight the pursuit of excellence behind the scenes, where staff members provide essential support for the Institution's museum and research activities. Stimulating programs from The Smithsonian Associates, for example, open a world of knowledge to those who participate, but first it takes talented staff to develop the content, orchestrate the logistics, and make the experience a rewarding one. Visitors to the National Museum of Natural History enjoy the expanded facilities and services in the new Discovery Center, thanks in part to several years of intense effort by staff in the various Operations units who helped make this addition to the Smithsonian landscape a reality. Our dedicated volunteers—this year, some 5,400 strong—make their own special contributions to excellence in just about every corner of the Institution.

Sustaining excellence requires more than hard work, high standards, and the will to succeed. For the Smithsonian, reliable and steady commercial revenue sources are increasingly essential as we look for ways to support our programs and create new ones that serve widening audiences.

This year, the Smithsonian strengthened its commitment to developing and expanding for-profit business activities by establishing Smithsonian Business Ventures, a separate entity within the Institution with its own board of directors. Gary Beer, the chief executive officer, oversees *Smithsonian*

magazines, museum shops, mail-order catalogues, concessions, commercial alliances, media-content products, direct marketing, and product development and licensing. Beer, who joined the Smithsonian near the end of this fiscal year, guided a similar venture to success when he was president and CEO of the Sundance Group, the for-profit arm of the Sundance organization founded by Robert Redford.

Underlying this organizational change is the same commitment to excellence that has driven the Smithsonian for all of its 153 years. During I. Michael Heyman's five years as Secretary, we have continued to explore new realms—physical, intellectual, and electronic. Now we are responding to present needs while thinking ahead to the Smithsonian's possible future roles and anticipating how we will support them. As the reports in this volume suggest, the various organizations that make up the Smithsonian are always looking at ways to fulfill their missions more effectively. As long as the commitment to excellence is at the heart of everything we do, we cannot help but succeed.

## Música de las Américas

In a celebration of Latino music traditions that the *Washington Post* called “sizzling,” “superb,” and “invigorating,” The Smithsonian Associates presented its ground-breaking “Música de las Américas” program. This series of six monthly concerts and complementary panel discussions explored the continuing influence of Latin styles on popular music in the United States. Top musicians performed in highly praised concerts that focused on popular Latin American musical genres: mambo and Afro-Cuban jazz, merengue, conjunto norteño, tango, bossa nova and cool jazz, and salsa and Latin jazz. Brazilian jazz icon Leny Andrade, the Machito

Orchestra, jazz legends Charlie Byrd and Herbie Mann, 1999 Grammy Award winner Flaco Jiménez, and Lydia Mendoza, the “Queen of Tejano Music,” were among the many performers.

Involvement with Latino communities is a priority for The Associates, and programs by, for, and about the history and culture of people of Hispanic origin are increasingly popular. “Música de las Américas” was made possible with the support of the Smithsonian Center for Latino Initiatives and America’s Jazz Heritage, a Partnership of the Lila Wallace–Reader’s Digest Fund and the Smithsonian Institution.

## Connecting to Smithsonian Resources

For more than 25 years, staff and volunteers in the Visitor Information and Associates’ Reception Center’s (VIARC) Public Inquiry Mail and Telephone Information Services have fielded an extraordinary variety of questions, from the predictable (“What are the Smithsonian’s hours?”) to the startlingly specific (“What is this insect? See enclosed.”). When the public is curious, VIARC is ready with assistance.

Today, people seeking information are more likely to send an e-mail than to pick up the telephone or mail a letter. Some 15,600 electronic inquiries arrived at VIARC’s address, [info@info.si.edu](mailto:info@info.si.edu), in fiscal year 1999, representing 45 percent

of all inquiries received and an 80 percent increase over last year’s electronic mail. Each month, thousands of cyber-visitors log on to the Smithsonian’s Web site, where they can browse Encyclopedia Smithsonian, a VIARC page that provides selected links to on-line information throughout the Institution. A VIARC behind-the-scenes volunteer has made critical contributions to the creation of this site, working with many Smithsonian organizations. Most recently, she collaborated with the Department of Entomology in the National Museum of Natural History to create the extensive “Bug Info” area (click on “Insects” in Encyclopedia Smithsonian).

VIARC volunteers and staff work with an impressive library of fact sheets and bibliographies on everything from mollusks to the history of taxicabs, created and revised over the years in cooperation with Smithsonian specialists. When the Institution joined forces with America Online in 1993 to create Smithsonian Online, VIARC contributed highlights from these information resources. By 1995, the Smithsonian had launched its own Web site, and VIARC was instrumental in supplying much of the initial content.

Although e-mail makes asking questions easy, VIARC still fields telephone queries at (202) 357-2700. “People are astonished when they get a live response,” says VIARC’s Katherine Neill Ridgley. Whether in person or on-line, she says, “people tell us how grateful they are to be connected to the wealth of knowledge and information the Smithsonian has to offer.”

# Reports of the Administrative Offices

## Office of General Counsel

*John E. Huerta, General Counsel*

The Office of the General Counsel (OGC) protects the legal interests of the Smithsonian Institution. In carrying out that mission, the OGC provides legal advice and counsel to the Smithsonian Board of Regents, Secretary, Provost, Under Secretary, and other managers on the administration of the Institution; represents the Smithsonian in litigation and other adversarial proceedings to which the Institution is a party and before federal, state, and local government entities on administrative matters; issues final determinations on administrative tort and personal property claims against the Smithsonian; and generally monitors developments in the law for application to the Smithsonian programs.

## Office of Planning, Management and Budget

*L. Carole Wharton, Director*

The Office of Planning, Management and Budget (OPMB) assists the Secretary and Board of Regents in setting priorities, allocating resources, and measuring performance. OPMB gathers, analyzes, and presents Institutional needs to the Regents, the Office of Management and Budget (OMB), and Congress for evaluation and disposition. OPMB also provides services to central and unit managers in order to improve planning for, as well as management of, Smithsonian resources.

In addition, OPMB develops and disseminates Institutional policy directives and announcements.

## Budget Management Planning and Policy System (BUMPPS)

BUMPPS is the Smithsonian's automated planning and budget system that provides up-to-date data for senior management and also interfaces with Office of Comptroller's (OC) Smithsonian Financial System to provide current year budget data on the financial reports. The BUMPPS team improved the security foundation and modified the existing eight modules of the system. It also developed, tested, and released the Grants and Contracts Budget Module, which allows the Office of Sponsored Projects to create, update, view, and report on the detailed budget records for nongovernment and government grants and contracts sources. In addition, the team redeveloped the Budget Transfer module based on enhancements identified by OPMB analysts and the units, and created and released new reports for the Budget Transfer and OMB Non-Allocated modules.

## Team Based Organization (TBO)

The TBO structure of the office continued to evolve as team members became more accomplished in the art of teamwork. Changes occurred in the structural details, but TBO remained the governing concept.

## The Smithsonian Associates

*Mara Mayor, Director*

### Programs In and Around Washington

#### *Resident Associate Program*

The Smithsonian Associates' (TSA) Resident Associate Program provided a spectacular array of courses, seminars, and special events for the greater Washington, D.C., area. The

year began with L'esprit de France, an exceptional collage of nearly 40 special events and programs to explore France and its contributions in art, architecture, music, history, philosophy, literature, language, cuisine, and style. The centerpiece of L'esprit de France was an elegant black-tie gala held at the Washington Design Center, chaired by Mary Ourisman and attended by the Ambassador of France. The celebration was headlined by events cosponsored with the Hôtel Ritz Paris, such as "The French Art of Tea" and "Rendezvous with the Ritz' Chefs."

TSA collaborated with Smithsonian museums on a variety of cultural and educational programs. Tim Johnson of the National Museum of the American Indian used stunning images to review the photographic history of Native Americans from the very beginning of photography more than 150 years ago. An impressive roster of speakers, including Doris Evans McGinty, Ed Guerrero, and Mark Naison, presented a seminar, "Celebrating the 100th Anniversary of Paul Robeson's Birth," to complement the National Portrait Gallery's exhibition on this great artist.

TSA presented a dazzling array of world-renowned figures. After a screening of extraordinary vintage footage trumpeting his historic Everest conquest, Sir Edmund Hillary, in an extraordinarily rare public appearance, received the James Smithson Bicentennial Medal. Author Tom Wolfe delighted his audience with witty repartee about his life as a writer in a conversation with Marc Pachter. Lesley Stahl reflected on her 25 years as a reporter. Psychologist Richard Carlson told us, "Don't Sweat the Small Stuff." Peter Jennings, anchor and editor of "ABC World News Tonight," reflected on the twentieth century.

Two very special programs highlighted the year. TSA presented one of the largest groups of former Presidential Press Secretaries ever assembled. Moderated by historian Michael Beschloss, the list of luminaries included George Christian (Johnson); Marlin Fitzwater (Reagan and Bush); Joe Lockhardt, Mike McCurry, and Dee Dee Myers (Clinton); Ronald Nessen, (Ford); Pierre Salinger (Kennedy); Larry Speakes (Reagan); and Ronald Ziegler (Nixon). The other spectacular program featured the great NASCAR drivers including Dale Earnhardt, Dale Earnhardt, Jr., Jeff Gordon, Kyle Petty, Richard Petty, and Darrell Waltrip.

TSA has had a long association with Oxford University through its study tours program. This year, for the first time, Smithsonian Associates were able to enjoy Oxford in Washington through three daylong seminars. Barry Cunliffe, professor of archaeology at Oxford, spoke about the history of the Celts and their contribution to western civilization. Oxford tutors Geoffrey Tyack and David Eddershaw covered "The English Country House" and "Oxford as University, City, and County."

Continuing its long collaboration with the National Air and Space Museum, TSA presented the 33rd Annual Smithsonian Kite Festival on the National Mall. This year's theme, "A Century of Flight: Looking Back" celebrated the centennial of Orville Wright's historic 1899 kite, which was a milestone in aviation history. Associates in the greater Washington area took part in more than 200 day and overnight tours in the region. Of special note is the popular journey to Frank Lloyd Wright's Fallingwater (PA), which was ex-

panded to include Kentuck Knob, another Wright home recently opened to visitors on a limited basis.

## Young Benefactors

The Young Benefactors entered its tenth year, continuing its mission of raising unrestricted funds for the Smithsonian Institution and increasing awareness among young professionals of the goals and objectives of the Institution. Among activities this year were a reception at the Latin American photography exhibit at the National Museum of American History, a cocktail reception at the Renwick Gallery, and the Tenth Annual Blast-Off Black-Tie Gala at National Air and Space Museum, which raised more than \$150,000.

## Masters Program in the History of Decorative Arts: Nineteenth- and Twentieth-Century American Decorative Arts

### *Maria Ann Conelli, Chair*

The Masters Program, now in its fourth year, sponsored a symposium entitled "The Theme Is Glass" in conjunction with the exhibition "Glass! Glorious Glass!" at the Renwick Gallery of the National Museum of American Art. Renowned glass artist Dan Dailey opened the morning session and was later joined by curators Paola Antonelli of the Museum of Modern Art and Vicky Clark from the Pittsburgh Center for the Arts. They addressed an enthusiastic audience of more than 125 attendees. Kenneth Trapp, curator-in-charge at the Renwick, provided an afternoon tour of the exhibition. The day ended with a lively panel discussion that ranged from the future of art glass to glass and modern technology.

Professor John Wilton-Ely, the distinguished art historian, joined the faculty and lectured on his forthcoming book, *Robert Adam and the Adam Style*. Students from the Masters Program later joined Professor Wilton-Ely in England to explore the celebrated English country houses and their interiors. During this summer seminar, students visited the collections of the Victoria and Albert Museum, Spencer House, the Wallace Collection, Osterley Park, The Sir John Soane's Museum, Strawberry Hill, and Chiswick House, to name a few.

The Masters Program continued production of the "Newsletter of the Decorative Arts Society." This publication, with an international readership, offers articles, exhibition and book reviews, news on recent acquisitions, and a calendar of events pertaining to the applied arts for museum and historic houses across the United States. Students in the Washington, D.C., program serve as writers, editors, and designers. Some have found their voice and careers in writing for the Newsletter.

## Programs Across America and Around the World

### *Smithsonian Institutes for Professionals*

Geared for corporate and association audiences who come to Washington from across the country, TSA's Institutes are

custom designed to meet the interests and needs of each client and can be used for training, awareness, or incentive programs. The programs, which may last from a few hours to several days, use Smithsonian collections, laboratories, research facilities, and exhibitions to help participants better understand diverse cultures and to foster fresh approaches to problem solving. The institutes include Smithsonian Creativity Institutes, Smithsonian World Affairs Institutes, and Smithsonian Signature Institutes. Companion programs also are offered.

In April, TSA presented a three-day World Affairs Institute about Southeast Asia for Indiana University as part of an ongoing relationship with that university. Notable international experts including ambassadors and congressmen as well as representatives the U.S. Department of Commerce and The Brookings Institution introduced 45 participants and their spouses to the economic complexity of the region through lectures. Embassies hosting events included Vietnam, Thailand, and Singapore.

A Signature Institute for 22 international members of the Young Presidents Organization (YPO) also occurred in April. Through a lecture, tour, and hands-on demonstration exercises, participants had a chance to get behind the scenes, learning the work of the National Museum of Natural History forensics department, as well as about skeletal biology.

An agreement was made with Lockheed Martin Leadership Institutes to provide Creativity Institutes to approximately 25 executives on a quarterly basis. The first half-day event was held in August.

### *Smithsonian Voices of Discovery*

TSA's Voices of Discovery takes Smithsonian experts into communities around the country. They present lectures and workshops in a variety of settings, from museums to public libraries. For the 11th year, TSA participated in "An Appalachian Summer Festival" in Boone, North Carolina, with speakers and topics relating to Appalachian crafts.

### *Smithsonian Scholars in the Schools*

This newly created program takes Smithsonian specialists into schools around the country to share their expertise with students and teachers. In addition to group lectures, hands-on classroom sessions, and teacher workshops, each custom-tailored program offers an evening public presentation for the greater school community. The Spring Branch Independent School District in Houston, Texas, which served as a pilot facility last year, hosted another highly successful series that reached several thousand students through live appearances and via Web and distance learning interactions with the scholars.

### *The Museum of Me*

Working with Educational Field Studies, Inc., TSA redesigned and expanded its Museum of Me program. Targeted at middle school student groups visiting Washing-

ton, D.C., this two-part program introduces them to museums, collecting, museum careers, and exhibit design. Before their trips, teachers receive a preview packet that includes a CD-ROM about the Smithsonian and a learning guide with suggested activities to complement their museum visit. While in Washington, the students attend a live, interactive 30-minute presentation in Discovery Theater where they are challenged to think like museum professionals and design an exhibition.

### *Smithsonian Study Tours*

With more than 350 national and international study tours offered this year, Smithsonian Associates had the opportunity to experience and learn about virtually every corner of the globe. For example, Associates traveled to "Southern Africa by DC3" for a classic aerial exploration of Zimbabwe, Botswana, and Namibia.

Grandparents, parents, and children joined educators atop Gargonza, a medieval Italian hilltop town, for the Smithsonian's first "Tuscan Summer for Families" study tour. Forty-one Associates took part in day tours specially geared for families, with children having the opportunity to experience a different culture and even play soccer with local youngsters.

In the United States, 80 Associates took part in a first-time cruise on a new ship, *Le Levant*, on the Great Lakes. Others enjoyed gala performances and joined music and drama experts behind the scenes at U.S. and Canadian performing arts festivals that included Spoleto USA (Charleston, South Carolina), Carmel Bach (Carmel, California), and Stratford (Ontario).

## Smithsonian Businesses

### *Roland Banscher, Acting Senior Business Officer*

The Smithsonian is committed to developing and licensing products that reflect its educational values and extend its message. From a business point of view, selling merchandise of high quality helps strengthen the Institution's financial base. From an education point of view, an exhibition catalogue, a CD-ROM, or products carrying descriptive information contribute to people's knowledge of collections and research programs throughout the Institution.

At the National Museum of Natural History, museum shop sales increased following the opening of the Discovery Center in May. A shop in the International Gallery supported the exhibition "Microbes: Invisible Invaders, Amazing Allies," with everything from gummy microbes to educational microscopes. The Arts and Industries Building shop now features "The Best of the Smithsonian" merchandise, including best-sellers from several museum shops, publications, recordings, Smithsonian Catalogue merchandise, and souvenirs.

The Smithsonian Catalogue continues to reflect the educational values and rich diversity of the museums and research

institutes. Every product receives curatorial approval. Sales in fiscal year 1999 exceeded \$39 million, an 11 percent increase over the previous year. The catalogue continues to dominate the museum theme catalogue market with a 30 percent market share. For the first time, circulation passed the 20 million mark.

Licensed products based on items in the Smithsonian's collections help extend the Institution's educational mission and generate revenue to meet programmatic needs. Every product must meet high standards before it reaches the marketplace. New products this year included a reproduction of explorer William Clark's compass in the National Museum of American History; jewelry adapted from the Hope Diamond and the Hooker Emerald from the National Gem Collection of the National Museum of Natural History; and a planetarium kit for students ages 8 and up inspired by the Albert Einstein Planetarium at the National Air and Space Museum.

Public food services attracted more than 2.5 million visits and almost one half million staff member visits, generating more than \$1.5 million in net revenue for the Smithsonian. The newest dining facility, the Atrium Café at the National Museum of Natural History, features six-story skylights and a varied menu, including made-to-order salads, soups, pasta, and a rotisserie station.

## Smithsonian Magazine

### *Ronald Walker, Publisher*

One of the Institution's primary outreach vehicles is *Smithsonian* magazine, read by nearly 7 million people each month. This year, lively and informative articles introduced readers to the usual broad scope of topics, including Erector Set inventor A. C. Gilbert; the mystical beauty of turquoise; "star parties" for amateur astronomers in Arizona; turn-of-the-century American artist Abbott Handerson Thayer; the cloud of "space trash" that orbits Earth; and the contentious new world of dam removal. The magazine attracts reprint interest from a variety of sources, particularly the field of education. Academic institutions, associations, and textbook publishers request permission to use *Smithsonian* articles as part of coursework material or for informational distribution. Roughly 70 percent of the more than 500 permission requests received in fiscal year 1999 were from organizations with an educational purpose or affiliation.

## Smithsonian Productions

### *Paul B. Johnson, Director*

Smithsonian Productions is the electronic media production center for the Smithsonian, basing its work on the research and exhibition activities of the Institution's museums and

research institutes. The unit shares the vast world of the Smithsonian with millions in the United States and abroad through quality television and radio programs, exhibition videos, and on-line media.

This year, Smithsonian Productions presented "The Mississippi: River of Song," the largest multimedia project in the Institution's history. The centerpiece was a four-part television series that premiered in January 1999 on PBS stations nationwide, taking viewers on a musical journey down the Mississippi River, from the north woods of Minnesota to the Gulf of Mexico. Produced with the cooperation of the Center for Folklife and Cultural Heritage, the project also included a seven-part radio series broadcast nationally on Public Radio International, a two-CD set issued by Smithsonian Folkways, a companion book, and extensive educational materials distributed via the project Web site. With major funding from Kajima Corporation, Hitachi, Ltd., the Corporation for Public Broadcasting, and PBS, the series was coproduced with the Filmmakers Collaborative of Boston.

Smithsonian Productions also produced a variety of programs for Smithsonian exhibitions. The video *Woody Guthrie's Legacy* accompanies the Smithsonian Institution Traveling Exhibition Service exhibition "This Land Is Your Land: The Life and Legacy of Woody Guthrie." For the Lemelson Center for the Study of Invention and Innovation at the National Museum of American History, the unit produced two videos and a puppet show for young people on African American inventor Lewis Latimer. *Titanic Mail*, produced for the National Postal Museum, is the first close look at the five mailroom clerks and the 6 million packages and letters that went down with the RMS *Titanic*.

## Office of Communications

### *David J. Umansky, Director*

The Office of Communications is responsible for the public face of the Institution. Its Office of Public Affairs (OPA) is dedicated to media relations, publications, and public relations. The Visitor Information and Associates' Reception Center (VIARC) serves the millions of people who visit the Smithsonian each year.

## Office of Public Affairs

The Office of Public Affairs, part of the Office of Communications, collaborated with the National Museum of American History to create and implement a plan to encourage media coverage of the Star-Spangled Banner Preservation Project. From the beginning, this project was of intense interest to the public, especially museum visitors, the media, and the White House Millennium Council, which selected the flag as a centerpiece of its Save America's Treasures campaign.

The first media “event,” held in October, was the infrared examination of the flag by National Aeronautics and Space Administration scientists. The after-hours taking down of the flag was shared with national television via a video news release sent out on satellite the following afternoon. Science media had a briefing on the project and a tour of the special conservation lab where the flag is installed for three years.

OPA provides regular support for the public relations efforts of Smithsonian museums and offices. This year’s projects included publicity and an advertising plan for “Microbes: Invisible Invaders, Amazing Allies” in the International Gallery. The exhibition brought record numbers of visitors to the S. Dillon Ripley Center and additional evening visitors to other museums that were part of the Summer Science Nights on the Mall program. In addition, OPA played a leading role in the publicity campaign surrounding the groundbreaking for the National Museum of the American Indian on September 28.

The office continued implementation of the Smithsonian’s new visual identity program, which was initiated last year with the introduction of a new logo, by working with staff around the Institution to apply the logo to everything from brochures and newsletters to product labels, signs, and stationery.

Three publications produced by OPA won First Place in the National Association of Government Communicators’ publications competition: *Smithsonian Year 1997*, jointly produced with Smithsonian Institution Press; *Smithsonian Institution Research Reports*, a quarterly newsletter; and *The Torch*, the monthly employee newspaper. During the year, OPA produced two additional brochures to assist visitors in touring the Smithsonian—an update of “Smithsonian Access,” a guide for disabled visitors, and a visitor brochure titled “Exploring African American Heritage at the Smithsonian,” which was supported by a grant from the Educational Outreach Fund administered by the Smithsonian Office of Education.

As part of OPA’s Institution-wide promotion program, the office bought commercial time for six months beginning in September on WTOP radio, the dominant news-talk station in the Washington area. The station’s listener demographics match those of Smithsonian visitors, Associate members, and donors. The spots, called “Inside the Smithsonian,” were broadcast every Friday morning during drive time and featured information for area residents on everything from what’s new at the museums to the latest artifact acquisition. To promote the museums’ fall season of exhibitions and programs, OPA ran two half-page advertisements in the *Washington Post*’s fall preview section on Sunday, September 12.

Near the end of the fiscal year, the Board of Regents was ready to name a new Smithsonian Secretary, and OPA handled the September 13 announcement in the Enid A. Haupt Garden and the publicity for the event. Secretary-designate Lawrence M. Small’s biography and other materials were available to staff, the public, and the press.

## Visitor Information and Associates’ Reception Center

*Mary Grace Potter, Director*

Throughout fiscal year 1999 the Visitor Information and Associates’ Reception Center (VIARC) pursued its mission to broaden the public’s knowledge, appreciation, and enjoyment of the Institution and to facilitate and promote participation in its programs and activities.

As a central support organization and the principal contact point for information about the Smithsonian, VIARC’s work was carried out through the Smithsonian Information Center (SIC); the Internet; museum information/member reception desks; response services for public and member mail, telephone, and electronic inquiries; outreach to the tour and travel industry; outdoor wayfinding stations; two large volunteer programs providing primary support for the Institution’s public information activities and for staff project assistance behind-the-scenes; and a docent program for the Castle.

VIARC observed an ambitious schedule of activity during the year to ensure timely contracting, implementation/ installation and completion of major projects affecting the Institution’s public information activities, for example, a new phone system, new backlit panels for the Smithsonian Information Center, and re-engineered outside wayfinding pylons; first-time digitization and photographic enlargements of the Information Center’s electronic maps; and design and installation of a new software program for the touch screen interactives in the Center, including the purchase of new hardware.

Fiscal year 1999 also marked the 10th anniversary of the Smithsonian Information Center, which over the decade has provided assistance to some 20 million visitors. Most of the Center’s primary information components were redesigned, refurbished, or replaced. The system for generating promotional graphics between theater shows was perfected and utilized extensively to highlight various exhibitions, services, and activities across the Institution.

Operating from 9:00 a.m. to 5:30 p.m. daily, the Center served some 1,854,903 visitors. Reception services were provided to 19,562 Associate Members and their families; 3,267 memberships were sold representing \$101,593.00 in revenue for membership programs. Castle Docents led 2,881 participants on 268 tours of the Smithsonian Building, which included the special biannual tours for TSA members.

Information desk services were provided in 13 museums by a corps of 664 Volunteer Information Specialists. Ninety new volunteers were recruited, trained, and placed in desk and telephone information assignments to maintain established staffing levels; 106 continuing education programs were provided to keep volunteers abreast of new exhibitions and activities and to enhance their knowledge of ongoing work in the museums. The “InfoSpecial” newsletter for Volunteer Information Specialists was produced quarterly. Volunteer contributions Institution-wide were acknowl-

edged in the annual *Torch* supplement. The annual Smithsonian-wide volunteer survey documented a total of 5,408 volunteers who contributed some 475,597 hours of service to the Institution during fiscal year 1999. Appreciation events for each of VIARC's volunteer groups were held with the Secretary speaking at both the winter and spring events.

Some 6,000 comment forms received from visitors/callers were processed and referred to the appropriate museums/programs for information and handling.

Postal and electronic public mail inquiries numbered 34,958. Electronic correspondence continued to escalate (15,585) reflecting an 80 percent increase over FY 1998. Almost two thirds of the electronic requests (9,776) were handled on-line. All preprinted resource materials (100+) were updated or revised at least twice during the year. Thirteen new fact sheets/bibliographies were created/uploaded to the World Wide Web. The *Sales Reference List* was updated and published quarterly. Outgoing responses to both mail and phone requests for information numbered more than 75,700. Documented public phone traffic handled through VIARC numbered 287,300 calls. (This figure is lower than the traffic actually handled because system crashes and the installation of the new Lucent phone program and hardware destroyed large segments of data.) Activities resulting in a high volume of telephone calls included "Star Wars" at NASM, "Van Gogh" at NGA, the Freer film series, *Everest* at the Langley Theater, and the NATO weekend.

In FY 1999, 1,224 volunteers were active in the Behind-the-Scenes program, contributing more than 171,437 hours of service in departments, divisions, and offices across the Institution. Translations completed for staff members by the program's translators numbered 116 in 13 languages. One hundred twenty-seven new requests from staff for project assistance were received during the year, bringing the total number of projects on file to 557.

Efforts to address the Institution's accessibility and cultural diversity goals were ongoing. Volunteer recruitment efforts continued to be successful in reaching a broad cultural pool. Of all new Volunteer Information Specialists and Behind-the-Scenes Volunteers, 24 percent and 30 percent, respectively, represented minority constituencies. VIARC staff played leadership roles on planning committees for all Heritage Month celebrations. Tours of the SIB were offered in Spanish during Hispanic Heritage Month and on a request basis throughout the year. The Tourism Outreach Coordinator attended the annual La Cumbre marketplace to promote travel to the Institution/D.C. from Latin America. Efforts to further accessibility were numerous, including initial planning to accommodate two blind and one low-vision candidate for the Volunteer Information Specialist corps; the design and installation of the new NMNH information desk; supply of WP and ASCII copies of the SI and Access brochures to all information desks for distribution to the public; uploading all Heritage Month activities to the Web; promotion of same in the Information Center theaters, via special recordings and through quarterly "Samplers" mailed in previsit packets; and redesign of the video cover for *Guide to the Smithsonian*.

Greater use of technology enabled VIARC to streamline internal and external communication and to facilitate ongoing information service responsibilities. Information resources (monthly exhibition directories, calendars, and other reference materials) were produced in hard copy and made available on-line to staff and volunteers through VIARC custom programs and to the public via the Web. Information on some 1,758 public programs was edited and formatted for the chronological calendar alone. Increased use of the capacity to produce "flash notes" through our in-house Info-Tools program alerted staff and volunteers to last-minute changes in information reducing previously required hard-copy memoranda by over 40 percent. In addition, moving the Information Center's interactive program from laser disk to hard drive reduced text entry from three programs to one, eliminating reformatting for separate programs, thus lessening the chance for error and saving hours of repetitive work and proofing time.

VIARC printed 26 publications using outside vendors and produced 62 in house including a new style manual and special Folklife binders. The *Guide to the Nation's Capital and the Smithsonian Institution* was updated and redesigned. A 50 percent increase in requests to review SI information in outside publications occurred boosting the annual total to 54.

Estimates indicate VIARC served some 400,000 visitors a month via the Web. Up-to-date information was available on planning a visit, new exhibitions, public programs, and answers to frequently asked questions. In addition, the *Encyclopedia Smithsonian* Web site, created and maintained by VIARC, functioned successfully as an index to the Smithsonian's vast resources and was the recipient of a second Dow Jones Business Directory "Select Site" award. Some 225 fact sheets/bibliographies were available to the public from the *Encyclopedia* site, which continued to be a work in progress.

On the tour and travel front, quarterly mailings to promote Smithsonian activities were sent to some 1,600 domestic/international tour operators, and 400,000 *At A Glance* leaflets were distributed to hotels/motels/information centers and travel agents. VIARC represented the Smithsonian at the three major travel trade shows, NTA, TIAA, and ABA, and also attended La Cumbre. A total of 290 tour operators requested and received meetings with VIARC's Outreach Coordinator. Significant time and effort were expended assisting SITES, NMNH-Discovery Center/Johnson Theater/Eurest and the Craft Show in promoting their activities to the travel industry with very positive results.

The NATO 50th Summit presented the most taxing problem of the year. To advise travel industry contacts of limited National Mall access and minimize the impact on clients, an "urgent" informational memorandum was sent to some 1,000 tour operators; faxes were sent to NTA online, ABA, DC Concierge, WCVA, the D.C. Chamber and TravelFile.

VIARC cohosted with WCVA an educational breakfast seminar for participants traveling to La Cumbre and worked with SITES to host a reception for D.C. Concierge to promote "Microbes."

Work continued with the Downtown D.C. Business Improvement District (DBID) signage committee. Text was



prepared for the 88 pedestrian directional signs scheduled for installation in the National Mall area. The latter received the approval of the Under Secretary.

## Office of Special Events and Conference Services

*Nicole L. Krakora, Director*

The Office of Special Events and Conference Services (OSECS) offers its knowledge and expertise to organizations throughout the Smithsonian, producing events that provide donors, guests, and visitors with memorable, positive experiences, which serve to cultivate continued support for the Institution. OSECS made possible nearly 400 events and scientific conferences this year, many of them for the Board of Regents, the Secretary, senior Smithsonian staff, and the Office of Membership and Development. Over the last five years, and following a change in office mission, the number of events OSECS produces each year has more than doubled.

The ground-breaking ceremony for the National Museum of the American Indian capped a year of high-level activities. Throughout the year, OSECS produced events for visiting dignitaries, including a reception and a meeting for the president of Colombia, hosted by the Office of the Provost; a benefit fund-raising reception on the occasion of the visit of His Holiness, the Dalai Lama of Tibet, hosted by the Center for Folklife and Cultural Heritage; and a dinner in honor of the president of the Republic of Panama, hosted by the Smithsonian Tropical Research Institute.

Opening receptions were held for a number of exhibitions, including "From Bento to Mixed Plate: Americans of Japanese Ancestry in Multicultural Hawai'i," hosted by the Office of the Provost, and "Microbes: Invisible Invaders, Amazing Allies," hosted by the Office of the Provost and the International Gallery. A luncheon marked the opening of the Folklife Festival, and a press conference and luncheon hosted by Smithsonian Productions celebrated the premiere of the Smithsonian television series "The Mississippi: River of Song." Fund-raising events included the Anacostia Museum's annual benefit masquerade ball, Carnival '99.

Meetings and conferences included the National Conference on Cultural Property Protection in Los Angeles, hosted by the Office of Protection Services; meetings and a luncheon for the President's Committee on the Arts and the Humanities, hosted by the Secretary; and activities in conjunction with the Board of Regents meetings, hosted by the Secretary.

Among numerous events produced for the Office of Membership and Development were the annual James Smithson Society and Smithsonian Treasures weekends, as well as activities associated with meetings of the Smithsonian National Board and the Smithsonian Corporate Membership Program.

## Office of Government Relations

*Don Hardy, Director*

Although always a priority of the Office of Government Relations, efforts to educate members of Congress and their constituencies about the abundance of Smithsonian outreach programs were significantly accelerated. Secretary I. Michael Heyman's determination and his success in bringing the Institution's collections and professional expertise into local communities have resulted in a greater congressional understanding of the Smithsonian's range and depth and, as important, an appreciation of its commitment to public service. By emphasizing the educational components of the Institution's museum and research activities, Government Relations staff are stressing the practical and immediate public benefit of Smithsonian programs and enlisting congressional assistance in making these program opportunities and educational materials available to their communities.

## Operations Directorate

The many different organizations that make up the Smithsonian depend on the internal framework of services provided by Washington-based administration, facilities, finance, and information technology staff. These services support and promote effective management throughout the Institution. This year, several offices in the Operations unit concentrated on strengthening their own operations through refined organizational structures, effective use of technology, and improved service to the Institution's museums, research institutes, and offices.

Efforts to strengthen internal financial services included organizational changes in the Office of the Comptroller, along with the hiring of Edward Knapp as comptroller. The Office of the Chief Financial Officer developed a report to better inform senior management about the Smithsonian's financial condition and began investigating the implementation of a new financial system. The Office of Planning, Management, and Budget put into place the final modules of the integrated electronic Budget Management, Planning, and Policy System (BUMPPS).

The Office of Protection Services (OPS) made significant progress in advancing the Smithsonian's strategic plan for replacing the Smithsonian Institution Proprietary Security System (SIPSS) and upgrading and integrating the security systems throughout Smithsonian museums and facilities. In partnership with the U.S. Army Corps of Engineers, OPS developed a master plan that outlines the technical specifications for a new integrated security system. In fiscal year 1999, OPS developed and implemented a comprehensive Y2K contingency plan for the electronic security system. Replacement of SIPSS in the National Air and Space Museum, Arts and Industries Building, Smithsonian Castle, and Hirshhorn Museum and Sculpture Garden was initiated and was scheduled for completion in December 1999. OPS also began the

designs for SIPSS replacement in the National Museum of Natural History, Central Control, and the Museum Support Center. The Smithsonian Tropical Research Institute is under design for that facility's first technical security system. With continued funding through fiscal year 2002, OPS is on schedule for complete SIPSS replacement within calendar year 2002.

Digital imaging possibilities continue to expand, as the Office of Imaging, Printing, and Photographic Services (OIPPS) began offering color prints made from digital image files and produced on photographic-quality digital printers. For the first time, OIPPS used all-digital imaging techniques to document remote fieldwork. National Museum of Natural History researchers recorded images with a high-quality digital camera and processed them on the spot in a laptop computer.

The Office of Equal Employment and Minority Affairs enhanced its capacity to track the effectiveness of the Smithsonian's staff recruitment efforts. This office also launched a Web site that gives small and disadvantaged businesses convenient access to information about doing business with the Smithsonian ([www.si.edu/oeema/sdbu.htm](http://www.si.edu/oeema/sdbu.htm)).

For the Office of Physical Plant, the ground-breaking ceremony for the National Museum of the American Indian's Mall museum signaled the start of a major construction project. Design of the National Air and Space Museum's Dulles Center was completed, and the replacement of the museum's skylights and windows continued. At the National Museum of Natural History, the new 80,000-square-foot Discovery Center opened to the public, and restoration of the museum's Rotunda was in progress. The Folger Rose Garden, offering year-round interest with roses, annuals, perennials, and woody plants, opened as a permanent addition to the Smithsonian landscape.

## Office of Equal Employment and Minority Affairs

### *Era L. Marshall*

Fiscal year 1999 for the Office of Equal Employment and Minority Affairs (OEEMA) was marked by continued emphasis on, and improvement in, advocating, facilitating, overseeing, monitoring, and reporting on all aspects of equal opportunity in the Smithsonian Institution's employment and business initiatives and relationships.

OEEMA made solid progress in reducing the backlog of EEO counseling cases to improve services to customers involved in the informal and formal aspects of the EEO complaint process. Mid-point (February) into the second quarter of FY 1999, the office had completed all of its pending EEO counseling cases, an achievement in line with a goal expressed a few years ago in the Five-Year Strategic Plan. Although an EEO office will always have new cases to process, we are convinced that our simplification of intake procedures, increased reliance on networking with such SI

partners as the Ombudsman, the Employee Assistance Program, and Labor Employee Relations, advocacy and use of mediation to produce settlements, and a continued use of internal staff to produce succinct and helpful Reports of Investigation have all contributed to our ability to resolve workplace disputes.

The mandatory "diversity action plans" required of units with 25 or more employees, which provide information used in OEEMA's annual "Accomplishment Report for Diversity Action Plans," detail unit initiatives in equal employment and provide OEEMA with one of the Institutional standards used in monitoring and evaluating the professional performance of SI Directors.

A major emphasis in FY 1999 was to refine, improve, and monitor our applicant flow database to ensure affirmative employment/diversity recruitment and hiring and to analyze Institutional trends by means of weekly, quarterly, and annual "applicant flow analysis reports." We have collaborated closely with OHR to produce a new "applicant survey form," which has already resulted in increased use by job applicants.

OEEMA further promoted diversity/affirmative employment goals of the Smithsonian by sharpening and expanding its Prevention of Sexual Harassment (POSH) database to gain a better understanding of the units and employees who need to take the training. We continue to make significant inroads in providing training for all SI employees in this very significant area that often provides the basis for filing EEO complaints.

OEEMA launched a SDBU Web site on SI's Internet Web page to make SDBU information easily accessible to small and disadvantaged businesses (SDBs) via the Internet Web page. The site includes information on doing business with the Smithsonian, the annual forecast of upcoming contracting opportunities, a link of SDBs to register their information electronically in the SDB database of vendors, copies of SI notices posted in the *Commerce Business Daily*, and other information.

OEEMA hosted the second in its series of focused small-business procurement fairs in November 1998. The fair focused on industrial supply vendors, and more than 70 SI staff members from various units met and networked with nine exhibitors. We have also initiated the planning process for the next fair, which will feature small exhibit supply vendors. SDBU also reports the Smithsonian's yearly contracting achievements relating to small, disadvantaged, and women-owned businesses in the "Contacting Achievement Report" to the Small Business Administration.

Through its SDBU Program OEEMA continues to partner with OPP, which generates approximately 70 percent of the Smithsonian's total contractual expenditures. Over the last fiscal year OEEMA organized numerous site visits to construction projects completed by these firms, and these efforts contributed to the awarding of three new 8(a) open-term contracts. We also coordinated training and education efforts with OCon, to include participation in OCon's "informational briefings" to SI staff with delegated procurement authority. OEEMA also worked with OCon to train SI staff who took part in OHR's "training for new supervisors" on

contracting procedures and SI's policy in doing business with SDBs. We participated in OCon's procurement policy committee meetings to ensure that SDB interests were considered in new SI policy initiatives.

The OEEMA Director and staff members served on important internal and external committees, councils, and advocacy organizations to provide advocacy for, and to promote, the Institution's diversity/affirmative employment goals. The OEEMA Director chaired the Council of Administrative Services Directors throughout the fiscal year. In addition, she participated, along with appropriate staff, in a number of Employee Relations Working Group meetings to discuss overlapping EEO issues in OHR, labor relations and OGC, and various attempts to resolve them. The Director and/or the SDBU Program Manager participated in monthly OSDBU (Offices of Small and Disadvantaged Business Utilization) Interagency Council meetings. The Small and Disadvantaged Business Utilization (SDBU) Program Manager also chaired the OSDBU Directors Interagency Council's SBA Working Group meetings.

During FY 1999 OEEMA provided advice and assistance to 330 employees and 178 management officials. The following were leading issues which the Director, OEEMA's cadre of EEO counselors, and qualified mediators worked to resolve over the fiscal year: selection/nonselection, promotion/nonpromotion, sexual/nonsexual harassment in the workplace, hostile work environment, proposals to suspend/remove, termination, reprisal/retaliation, performance evaluations/ratings, disparate treatment and perceptions thereof, time limits in the EEO process, the status of individual EEO complaints, the status of EEO investigations, the ADR process and procedures, settlement issues and procedures, performance evaluations/ratings, work duties and responsibilities, and employee/managerial rights and responsibilities.

The OEEMA Director attended a meeting on September 29, 1999, with OGC officials and the Office of the Under Secretary to discuss new EEOC regulations and their effect on the federal sector. We met with the SI Ombudsman to address issues not covered under Title VII.

The OEEMA Director and the Precomplaints Program Manager participated in a meeting with SI Archives and OGC personnel on July 26 to discuss when reports of investigation should be destroyed.

The OEEMA Director and the Precomplaints Program Manager participated in an EEOC briefing on July 21 to discuss ways to improve efforts to eliminate and prevent discrimination in the federal workplace and the impact of revised EEOC regulations on the federal sector.

During FY 1999 OEEMA received 457 telephonic requests for assistance/information from employees and managers, and 170 office visits. At the end of the fourth quarter only 14 requests for counseling were carried over.

Our counseling and assistance efforts encompassed a wide range of units, including OPP, MSC, SERC, NASA, NZP, NMNH, OMD, Ocon, CFCS, etc., where we focused individual advice and assistance efforts to resolve issues, including hostile work environment, harassment, health, safety, promotions, and reasonable accommodations.

OEEMA attended a meeting between members of the Quality of Workplace Review Committee and the National Council of La Raza to seek assistance in publicizing the Smithsonian's co-op initiative to recruit Hispanic applicants.

Thirty-four formal complaints were filed during FY 1999. Forty-two formal complaints were closed during the fiscal year; 76 complaints were open at the end of the reporting period. Of the 42 closures, there were 15 dismissals, 1 withdrawal, 13 settlements, and 13 final agency decisions (FADs), including those with and without a hearing. Of the 13 FADs, no discrimination was the finding in each.

Four of the 13 final agency decisions were without hearing; 9 of the 13 were with a hearing. The Smithsonian accepted all 9 recommended decisions of the administrative judges.

At the end of the fiscal year, 3 complaints were pending written acknowledgment of receipt; 16 investigations, 32 hearings, and 21 FADs were pending in inventory.

Relevant OEEMA staff members participated in a series of Smithsonian alternative dispute resolution program meetings over the fiscal year and it was agreed that presentations would be made to each museum/bureau and each Smithsonian Council.

OEEMA staff members participated in a meeting on December 1, 1999, to develop a roll-out plan for the alternative dispute resolution process under development by OHR.

During FY 1999 34 investigations were closed; 19 investigations were closed by one OEEMA staff member. At the end of the fourth quarter, 10 investigations were being conducted. Of these, 2 were being conducted by one OEEMA staff member.

With the assistance of a summer employee, new filing systems and an electronic database for formal complaints were refined. These are ongoing initiatives into the new fiscal year.

OEEMA prepared the FY 1999 "Accomplishment Report on Diversity Action Plans" for units with 25 or more employees. The report was provided to the Provost and the Under Secretary and is being used to evaluate SI Directors' equal employment opportunity performance. We assisted EEO officers in OPS, OMPB, NPM, OMD, NMAH, and AAA in the development of their unit diversity action plans.

We participated in a November 12 meeting to evaluate OHR's pilot mandatory training program for new supervisors, providing information on the training and suggesting ways to improve its effectiveness. We worked with NMNH to advise and assist in evaluating progress in meeting mandatory requirements for the training as well as for the Prevention of Sexual Harassment briefing. In addition, we proposed ways to improve attendance at these courses.

OEEMA met with the Director, Center for Latino Initiatives, to discuss the hiring, recruitment, and retention of Latino employees.

The Diversity/Affirmative Employment Program Manager served as OEEMA's representative on the planning committee for the SI Secretary's Day of Excellence, in tandem with the Executive Director, Office of the Under Secretary, the Director of OSE, and with staff from OHR and

OEMS. The committee developed publicity and nominations criteria. The Day of Excellence was held on June 15, 1999, and was very well received.

On April 2, 1999, we met with the Deputy Director, NMAfA, to discuss a diversity roundtable for supervisors. Further discussion, led by OEEMA's Diversity Program Manager and NMAfA's Deputy Director, was held on April 13.

The Diversity/Affirmative Employment Program Manager participated as a speaker at an in-service meeting of the Smithsonian's Occupational Health Services Branch on May 27. The topic of discussion was "An Update on Providing Reasonable Accommodations." We briefed OHR's personnel management specialists on reasonable accommodation issues to include information on how to verify an individual's disability, the process for determining reasonable accommodations, and special hiring authorities for people with disabilities.

We attended EEOC's Technical Assistance Program on August 4. Topics included the impact of recent Supreme Court decisions on ADA and harassment cases and their impact on implementing EEO laws.

We met with OHR staff on August 18 to discuss internal procedures for processing reassignments based on disability. This committee was established in response to an OEEMA briefing on EEOC's new ADA guidelines.

We met with OHR's Chief, Recruitment and Training Branch, on August 23 to develop a request for training data within OEEMA's Call for Accomplishment on Diversity Plans.

The Smithsonian's new applicant survey form was developed and coordinated with relevant SI units and will be implemented in FY 2000.

The Director and the Special Emphasis Program Manager met with an OHR official on May 4 to request that a statement be included in OHR's notification to applicants that would highlight the importance of submitting information on race/gender through proper completion of the "Background Survey Questionnaire."

We worked with the Assistant Director for Operations, OHR, to add a diversity awareness statement and change the wording from "EEO approval" to "EEO review" on the selection certificate. A total of 459 certificates were reviewed during FY 1999. A total of 1,046 selections were processed.

OEEMA revised the tracking system for applicant flow. We devised a new way to record senior-level positions, ethnicity, promotions, and selectees who have changed series, as well as qualified applicants, referred applicants, and comments. We continually analyze the data to determine the impact of the Smithsonian's recruitment and hiring trends. A total of 260 records were added to the database in the fourth quarter. We also generated an improved and more comprehensive report for the weekly review of recruitment trends, the "Applicant Flow Analysis Report."

The OEEMA Barrier Analysis Team researched and prepared narratives and graphics on applicant flow senior-level historical trends.

Selecting, reviewing, adapting, and presenting a training module to provide mandatory Prevention of Sexual Harassment training for Smithsonian employees was a major and ongoing initiative for the fiscal year. We developed a plan for the POSH refresher module as well. The training was presented to more than 177 employees at SI Retail, NASM, OPS (including OPS New York and summer hires), and SERC (NY) employees. We also improved and enlarged the POSH database to include 1,976 records. A total of 1,740 records were added in the last quarter. We also assisted OPS training staff on May 10 to correct their POSH and "EEO for Supervisors" databases. The databases were used by OPS to ensure that personnel participated in the required training modules.

OEEMA presented four briefings for the OHR-sponsored New Employee Orientation Program to advise recently hired employees of the office mission, programs, and contact information.

OEEMA worked extensively with employees and supervisors of a number of units to reasonably accommodate disabled employees and to address other workplace issues.

OEEMA continued to coordinate training and education efforts with OCon. This included participation in each of OCon's quarterly informational briefings to SI staff with delegated procurement authority. Along with OCon we also trained SI staff who took part in OHR's Training for New Supervisors on contracting procedures and SI's policy in doing business with SDBs. We participated in OCon's procurement policy committee meetings to ensure SDB interests were considered in new SI policy initiatives. We also organized regulation meetings with OCon management to discuss various issues, including renewal of our memorandum of understanding (MOU) with the Small Business Administration (SBA), which delegated 8(a) contracting authority, discussed FY 1999 contracting achievements, and obtained input on SI's FY 2000 procurement goals.

We continued to work closely with the SDB liaisons, particularly at the larger bureaus of NMAH, NMNH, and NASM. We obtained their assistance in organizing procurement fairs which were held at NMAH (FY 1998) and NMNH (FY 1999). We provided a comprehensive overview of the SDBU Program to NASM fund managers. The NMAH SDB Liaison was awarded the Secretary's Award for Excellence in SDB Utilization. We also organized two meetings of the liaisons during the year to discuss the SDBU Web site and other topical issues.

We continued to participate in the OSDBU Directors Inter-Agency Council monthly meetings and also participated in several special meetings called by the SBA or the Office of Federal Procurement Policy to discuss topical issues. The SDBU Program Manager chaired the Council's SBA Working Group and held quarterly meetings to discuss SBA programs. We participated and staffed exhibit booths at several local and national SDB conferences. Over the fiscal year we provided advice and assistance to more than 356 representatives from more than 350 firms and had individual meetings with approximately 60 of these firms.

Subcontracting is becoming more important as the size of the average contract rises due to consolidation and larger construction projects. During the year we evaluated three new subcontracting plans submitted by SI prime contractors and monitored performance on six existing large contracts. We also had extensive discussions and meetings with the U.S. Army Corps of Engineers, which is contracting with various large and small businesses via its multiyear MOU with the Smithsonian to upgrade SI's security systems.

## Office of Facilities Services

*Richard H. Rice, Jr., Senior Facilities Services Officer*

The Office of Facilities Services, along with other organizations in the Facilities Services Group, focused much attention to managing for results and strategically aligning the entire organization to move toward a more performance-based, customer-oriented system. The Office also led the strategy to increase funding for repair of the Smithsonian's physical plant, which resulted in appropriation of \$47.9 million for FY 2000, including repairs at the National Zoological Park.

## Office of Physical Plant

*Michael J. Sofield, Director*

The Office of Physical Plant creates and maintains the infrastructure and environment within which the Smithsonian museums, research institutes, and offices pursue their goals. The work of the office includes capital construction projects; repair, restoration, and alteration of buildings; crafts and trade work to maintain facilities; operation of utilities systems; landscaping and gardening for Smithsonian properties, transportation and mail services; and architectural research and historic preservation. Ken Olmsted joined the office as Deputy Director in 1999. During the year, the office maintained its emphasis on projects that support repair and restoration of Smithsonian facilities and broke ground for the National Museum of the American Indian Mall Museum.

## Office of Protection Services

*David F. Morrell, Director*

Deriving its legal authority from Title 40, U.S. Code, Section 193, the Office of Protection Services (OPS) has as its mission, "Protecting and securing the National Collections and other properties entrusted to the Smithsonian Institution and ensuring the safety and security of staff and visitors,

while permitting an appropriate level of public access to collections and properties."

During this year, the Office of Protection Services recruited and hired 131 Museum Protection Officers (MPOs). The OPS Training Division conducted seven two-week basic training courses for all new MPOs. The two-week training courses focused on basic security operations within a museum setting. OPS continued its contract with Wackenhut Services Incorporated to provide supplemental training to OPS staff. In a two-day MPO refresher course developed by OPS and Wackenhut, 500 MPOs received refresher training. OPS and Wackenhut also conducted 11 two-day Supervisory Security Officer refresher training courses for 150 supervisors. In addition, OPS contracted with Wackenhut to provide three five-day administrative training courses for 75 administrative personnel and one five-day supervisory administrative course for 20 administrative supervisors.

In April 2000, OPS worked closely with the U.S. Park Police and the Washington D.C. Metropolitan Police Department in implementing citywide security precautions during the 50th anniversary of the United Nations held at the Department of Commerce near the National Museum of American History.

Also this year, Francis Roche was selected as Assistant Financial Management Officer in May 1999. David Voyles was selected as Chief of the Audits and Compliance Office in August 1999. In addition, Howard Blum was selected as Chief of the Security Services Division in August 1999.

In our continuing effort to upgrade and modernize security systems throughout the Smithsonian, OPS continued to work closely with the U.S. Army Engineering Support Center, Huntsville, Alabama. During this year, OPS evaluated and selected two modern off-the-shelf electronic security management systems, responsive to the Smithsonian's need to replace the Smithsonian Institution Proprietary Security System. OPS also worked to ensure that the Institution was prepared to meet the technological requirements for the year 2000. OPS also worked closely with the Smithsonian's Office of Physical Plant to complete the design and installation of a new security system for the National Museum of the American Indian Cultural Resources Center. In addition, OPS completed engineering designs and began system replacement installation at the National Air and Space Museum, Hirshhorn Museum and Sculpture Garden, Arts and Industries Building, Smithsonian Institution Building, and Renwick Gallery.

The National Conference on Cultural Property Protection was held in Los Angeles, California, from March 7 to 11, 1999. The conference was cohosted by the J. Paul Getty Trust. For over 20 years, this self-supporting conference has provided an opportunity for the diffusion of knowledge among security, library, and administrative professionals. The theme for the conference was "Cultural Property Protection From the Ground Up." The conference attracted close to 300 participants from the United States, Canada, and abroad.

## Office of Contracting

*John W. Cobert, Director*

During fiscal year 1999, the Office of Contracting continued to be the central office for advisory and assistance services to the Smithsonian Institution museums, research institutes, and offices (units) on contracting and procurement requirements. These services were provided directly by the Office of Contracting staff, and indirectly through the over 400 individuals at 66 Smithsonian units who have been delegated authority by the Director of the Office of Contracting to make transaction commitments on behalf of the Smithsonian Institution. Administrative and program support to the Smithsonian units was also continued in FY 1999 by the Administration Division through the activities of the Travel Services Branch and the Property and Inventory Management Branch.

Under the guidance of Office of Contracting staff, necessary actions were completed by the units, or in the Office of Contracting, for the formation and administration of business transactions involving most of the Smithsonian's appropriated federal and Institutional trust funds that were obligated during the fiscal year. Major contract awards by the Federal and Trust Fund Contracting and the Renovation and Construction Contracting Divisions during FY 1999 included a contract for renovations to the Castle and to the Arts and Industries Building, and a contract for renovations to the Carnegie Mansion and Miller Fox townhouse of the Cooper-Hewitt, National Design Museum. Contract administration was continued for completion of the Cultural Resources Center (CRC) of the National Museum of the American Indian located in Suitland, Maryland, which was opened in February 1999.

The Business Contracting Division provides advisory and planning support services to the Smithsonian units for income-generating contracts and special business relationship agreements. During FY 1999 the Business Contracting Division completed agreements for some of the Smithsonian-sponsored events that were part of the "Millennium on the Mall" celebration. An agreement to purchase the Victor Building was also developed and negotiated with the assistance of the Business Contracting Division staff.

The Procurement and Training Branch continued to conduct and sponsor procurement-related training courses in FY 1999. These courses were designed to provide staff at the Smithsonian units with information to assist in effective and efficient management of the decentralized procurement program, as well as to support unit responsibilities for developing and managing contracts. During FY 1999, the Office of Contracting was able to accommodate 425 participants at the 19 training courses that were conducted. The courses covered six different topics.

The Travel Services Branch completes travel arrangements and provides carrier-ticketing services for Smithsonian employees. There were 10,758 transactions completed by the Travel Services Branch during FY 1999. Transactions cover tickets issued and allowable refunds for travel that was not

completed. In November 1998, the Travel Services Branch issued information and guidance to Smithsonian staff regarding the change of employee travel card provider that was effective at the end of the month. Ms. Judith Petroski, Travel Services Branch Manager, met with the Smithsonian Administrative Officers to advance information regarding the travel card provider procedures and the commensurate changes to the Smithsonian's travel card policy and coordination practices.

Among the services that the Property and Inventory Management Branch staff provided to the Smithsonian units during FY 1999 was to tag and record more than 2,200 items of accountable property. Other services provided included delivery of approximately 6,100 items to the Smithsonian units that involved 2,700 trips by the central warehouse staff.

The Office of Contracting staff is dedicated to providing quality services to our clients to assist in furthering the mission of the Smithsonian Institution. We shall continue to do our very best to assist in bringing to fruition the world-class exhibits, programs, and services that the public enjoys, and has come to expect, from the Smithsonian Institution.

## Office of the Treasurer

*Sudeep Anand, Treasurer*

The Office of the Treasurer (OT) is responsible for ensuring the growth, safety, and integrity of the Smithsonian's financial assets, developing funding for major new Trust projects, and preserving and protecting its operations, collections, facilities, and other assets.

OT manages the Institution's Endowment and working capital funds. The overall objectives of the Endowment are to provide a stable, growing stream of payouts for current expenditures while protecting the purchasing power of the Endowment. Investment of the Endowment to ensure that it grows more rapidly than inflation contributes importantly to the financial strength of the Institution. In 1999, OT managed over \$700 million in assets.

OT is responsible for the evaluation, structuring, and funding of major Trust projects. The disciplined evaluation of new projects ensures that the Institution manages its capital responsibly. The effective structuring and funding of major projects provides the wherewithal to undertake the major building (and other) projects, which are required to dramatically increase the public impact of the Smithsonian. In 1999, OT was actively involved in the NASM Dulles Center project.

OT is also responsible for the risk management, insurance, and disaster preparedness planning programs of the Institution.

The risk management program identifies the risks inherent in dealing with large audiences, research activities, and the businesses of the Smithsonian. The insurance programs are designed to complement the federal immunities in protecting the Institution against this broad range of risks. In

FY 1999, insurance claims were kept at a minimum and collection insurance was purchased at less than .0042 per \$100.

The disaster preparedness and continuity planning programs are aimed at minimizing the damage from emergency situations. The Institution-wide programs emphasize the protection of staff and visitors, collections, and research materials; the recovery and restoration of assets; and the resumption of operations in an organized, efficient, and timely manner. These contingency plans protect the financial strength of the Institution and allow the Institution to minimize the impact of unforeseen emergencies on the Institution's public outreach and scientific research activities. In 1999, OT served on the Under Secretary's special committee on Y2K. OT also obtained the services of an internationally known continuity planning expert who provided an executive-level presentation for upper management at SI.

## Office of Information Technology Operations

*George Van Dyke, Director*

The Director of Information Technology Operations is responsible for planning and managing the implementation, day-to-day operation, maintenance, IT security, and disaster recovery of the Smithsonian's information technology infrastructure, including end-to-end network connectivity operations and technical support services: Help Desk, office automation, and desktop support services; the Smithsonian's computer facilities; system and data base software; and Internet/Intranet services.

# Report of Development and Membership

## Robert V. Hanle, Executive Director for Development

### *Building Momentum for Tomorrow: Development and Membership*

The final year of the twentieth century saw the Smithsonian developing stronger and more varied partnerships with a variety of audiences. As we build toward the public phase of our first-ever national capital campaign, these partnerships become increasingly vital to our continued health and ability to reach new audiences in innovative ways. Of course, since the Institution's first philanthropic bequest from James Smithson, the Smithsonian has forged ties with individuals and with the business and foundation communities. This year was no different, even as the range and diversity of these partnerships expanded.

The Institution remains the sole organization of its kind in the world, a unique public-private partnership that benefits from the foundation of support of the U.S. government but flourishes and evolves through private funding. In fiscal year 1999, the Institution received more than \$146 million from this public-private partnership. Donations from individuals constituted \$94.155 million, or 64.46 percent of the total, which includes the extraordinary gift of Steven Udvar-Hazy to the National Air and Space Museum, and planned gifts such as annuities and bequests from individuals. Corporations and foundations, including those established by individuals, contributed \$41.5 million. Of the total raised, \$130.8 million was restricted to specific programs.

For two consecutive years, private support has been significantly higher compared to previous years, and this momentum highlights both the strength of our work and the meaning our goals and programs have for audiences throughout the world. The Smithsonian is striving not just

to keep pace with technological advances, but to break new ground so that the time-tested objects we hold in trust can open new stories for future generations and continue to inspire all who step through our doors today.

In this Development and Membership report, we gratefully recognize the many individuals, corporations, foundations, and organizations that have joined in partnerships with the Smithsonian this year and over the long term. Many successes are described throughout this publication. Donors of \$2,000 and above from October 1, 1998, through September 30, 1999, are listed later in the publication.

### *Campaign Smithsonian*

Much progress was realized this year in the upcoming national capital campaign in which the Smithsonian will ask the American people for their support to ensure that the Institution remains a vital national resource.

Steven Udvar-Hazy's \$60 million pledge to the National Air and Space Museum's Dulles Center in September allowed the museum to announce its capital campaign—with a goal of \$130 million—nine months earlier than anticipated. This wonderful leadership gift is the largest the Smithsonian has ever received and one of the largest ever to a museum. It signifies the personal involvement with the Smithsonian that will be key to the campaign's success. We salute Steven Udvar-Hazy, his commitment to the field of aviation, and his pledge to work with others who have the capacity to make significant gifts toward the Smithsonian's future.

Also this year, Smithsonian museums, research institutes, and offices began to draft their own statements of needs. We worked to formulate campaign messages and develop marketing strategies. A new Institution-wide database will help us cultivate our supporters. We launched *Smithsonian Today*,



a newsletter for the Contributing Membership and other Smithsonian supporters that highlights ways their giving is having an impact. New policies include an endowment policy that details different ways our friends can support the Smithsonian in perpetuity, including the establishment of academic chairs, and a policy for naming opportunities that outlines how supporters can link their name, or those of their family or loved ones, to exhibition galleries, lecture and performance halls, reception areas, and other spaces visited by millions of people each year. A donor recognition room in the Castle, now nearing completion, will recognize major gifts from individuals, foundations, and corporations—the visionary support that enables us to pursue ground-breaking initiatives and permanently shapes the future of this unparalleled Institution.

We all have a stake in this Institution, as well as an emotional connection to it, and that is the true core of partnership. While supporters receive tangible benefits, including recognition and special opportunities, at the core is an agreement between them and the Smithsonian that their support will be used wisely, advancing one of the greatest public-private partnerships the world has ever known.

### *Smithsonian National Board*

The Smithsonian National Board continues to be one of the Institution's premier volunteer groups, serving in an advisory capacity to the Secretary and raising significant funds both for unrestricted use and for specific areas the board has targeted. This year, the board's annual giving fund raised more than \$1.5 million for a donor recognition room in the Castle, now under construction across from the Smithsonian Crypt, and a membership and donor coordination system that will have a measurable impact on the Smithsonian's ability to form meaningful relationships with supporters nationwide.

In addition to its two yearly meetings, for the first time the board held a February meeting, inviting chairs of all the volunteer boards and commissions across the Institution, along with directors of the museums and research institutes. The meeting was a basis for dialogue about how these important volunteers could maximize their efforts on behalf of the Institution. Secretary I. Michael Heyman delivered a keynote address on ways the wide-ranging parts of the Smithsonian relate to an organic whole. Breakout groups discussed the national capital campaign and how the boards will work together for greatest impact. The Smithsonian National Board will continue to play a leading role in the capital campaign.

### *Contributing Membership*

The Contributing Membership continues to be a major resource for the Institution. In 1999, annual dues and additional contributions from this generous group of individuals yielded nearly \$10.2 million in unrestricted funds, the highest gross income in the history of the program. This

success was a result of a strategic marketing investment that generated 9,000 new members and a 12.6 percent increase in contributions from existing members. These funds can be targeted toward research, exhibitions, or other areas where support is needed.

The Contributing Membership is the fertile ground from which many of our longest-lasting partnerships with individuals emerge, and the program provides an avenue for them to further explore the Smithsonian through tours, publications, and special events. This year's "Smithsonian Treasures," the week-long series of tours for members, took more than 50 people behind the scenes at the Smithsonian Institution Archives, the Horticulture Services Division, the National Portrait Gallery, and other areas that reflect the many facets of the Institution. Many Contributing Members also strengthened their support by moving to higher membership levels. In response to new targeted messages in their renewal letters, 54 Contributing Members upgraded to the James Smithsonian Society, the highest number in recent years.

The Contributing Membership also led the way to a greater philanthropic visibility on the World Wide Web and developed a Web site where visitors can make a secure gift to the Smithsonian on-line, at [www.si.edu/sidonations](http://www.si.edu/sidonations).

### *James Smithsonian Society*

As the leading circle of support through membership, the James Smithsonian Society continues to raise significant funds for the Institution. The society's 550 members this year gave nearly \$826,000 in dues and special gifts. To enhance relationships with these members, especially in preparation for the national capital campaign, the society added a director and program coordinator this year, both committed to the program's success and growth.

The James Smithsonian Society Endowed Life Program welcomed new member Richard Triska. Endowed Life Members make a one-time gift of \$40,000 or more. Earned income from the endowment gift supports priority initiatives across the Institution in perpetuity and the member's annual dues for the James Smithsonian Society. This growing program provides long-term support critical to Smithsonian planning and to the Institution's ability to serve future generations.

In the summer, a tour of "Posters American Style" and dinner with Secretary and Mrs. I. Michael Heyman brought together Smithsonian Society members in the San Francisco Bay area. Members also enjoyed a new program called "Food for Thought," in which curators talked with members about the Star-Spangled Banner Preservation Project, panda conservation, and the National Air and Space Museum's Dulles Center.

The Eberly Family Charitable Trust was recognized with the James Smithsonian Society Founder Medal at the society's annual black-tie dinner in May. The Eberly family, a longtime member of the Smithsonian Society, was honored for its gift to create the Eberly Minerals and Gems Gallery in the Janet Annenberg Hooker Hall of Geology, Gems, and Minerals in the National Museum of Natural History.

## *Highlights of Corporate Philanthropy*

Partnerships with the business community are expanding as corporations recognize the many ways the Smithsonian can invigorate their employees and improve the quality of life for people across the globe.

This year, the Corporate Membership Program continued to grow and now counts 75 members who represent a wide range of industries and geographic locations. At the program's annual luncheon in June, held at the Department of State, Smithsonian Regent Howard H. Baker Jr. awarded membership certificates to 24 new members. Polo Ralph Lauren was recognized with the annual Corporate Leadership Award for its support of the Star-Spangled Banner Preservation Project.

In 1999, the Corporate Membership Program raised more than \$1 million for unrestricted use and served as a basis for further partnerships between the Smithsonian and the business community. The Institution's successful work in this area has begun to open new doors for exchange. Many corporations entered into innovative partnerships, from Southern Company's donation of electric vehicles to the National Zoo, to Pfizer Inc's support of the popular interactive exhibition "Microbes: Invisible Invaders, Amazing Allies." The generosity of the business community has a substantial and positive impact on the work of the Smithsonian, and through these partnerships, we are able to explore new technologies, reach new audiences, and study mutually beneficial approaches to our world.

To clarify guidelines whereby the Smithsonian may benefit from corporate support while maintaining its integrity and autonomy, a corporate sponsorship policy now elaborates on different ways corporations can work with the Institution.

## *Foundations*

Foundations continued to invest in Smithsonian programs and services this year, finding through the Smithsonian a multitude of pathways for reaching different audiences. Work continues to target key programs through which the Smithsonian can leverage foundation support to make a difference to the lives of citizens of the National Capital region, around the country, and throughout the world.

The range of foundation types and the scale and focus of projects they supported were as comprehensive as the Smithsonian itself. To name a few, the John S. and James L. Knight Foundation supported the Smithsonian Institution Traveling Exhibition Service's Museum on Main Street program, which takes Smithsonian resources to rural communities; The Eberly Family Charitable Trust created the stunning Eberly Minerals and Gems Gallery, an extraordinary resource for learning about geologic phenomena; The Hill Family Foundation supported the Hirshhorn Museum and Sculpture Garden's "Regarding Beauty" exhibition, a 90-work show with 36 international artists that will explore the age-old concept of beauty as a topic and issue for art making; the Andrew W. Mellon Foundation supported the Smithsonian Tropical Research Institute's plant ecological research; and

the John D. and Catherine T. MacArthur Foundation funded the Center for Tropical Forest Science, which provides an overview of environmental change and conservation issues through its long-term monitoring of forest plots.

## *Smithsonian Benefactors Circle*

In October, the Smithsonian Benefactors Circle enjoyed a black-tie dinner and gave its annual award to the Kenneth E. Behring family for its \$20 million gift to the National Museum of Natural History. The gift will resonate for years to come through the museum's renovated Behring Family Rotunda and Kenneth E. Behring Hall of Mammals, as well as through traveling programs that will raise awareness about mammals, their habitats, and their interactions with humans.

## *Smithsonian Women's Committee*

Once again, the annual Smithsonian Craft Show, which in 1999 was chaired by Margaret Collins, demonstrated why it remains the most prestigious juried craft show in the nation. The volunteers of the Women's Committee, which is chaired by Millicent Mailliard, staged the spectacular event in April at the National Building Museum, bringing in record numbers of attendees and raising nearly \$335,000 for the committee's competitive grants program.

In turn, more than \$319,000 from the 1998 show was distributed in the spring to an extraordinarily wide range of worthwhile Smithsonian programs, providing seed money and small grants to projects that otherwise might never leave the drawing board. From film preservation to specialized training for students, this grant program continues to fill a valuable funding need at the Institution.

## *Smithsonian Washington Council*

The Smithsonian Washington Council is a group of area civic and philanthropic leaders working toward strengthening the Smithsonian's ties and services to the National Capital region. Chaired by Washington attorney R. Robert Linowes, the group meets regularly with the Secretary. This year, members made a gift in support of a lecture series at the Smithsonian Environmental Research Center for the 1999–2000 season and also made several gifts for the Institution's unrestricted use.

## *Smithsonian Legacy Society*

The Smithsonian Legacy Society, chaired by Gloria Hamilton, also grew this year, holding its second annual luncheon and meeting at the National Museum of American History in November. The group honors supporters who carry on James Smithson's tradition through gifts such as bequests, charitable gift annuities, and life insurance plans. This year, Legacy Society member Karl Hagen's generous bequest benefited the National Air and Space Museum.

### *Smithsonian Luncheon Group*

The Smithsonian Luncheon Group, a circle of supporters from the Washington area, meets regularly to learn about Smithsonian programs. Chaired by C. Benjamin Crisman, the group this year heard from Secretary Heyman and curators and directors about the Smithsonian's goals and activities for the coming year. Other programs highlighted the Star-Spangled Banner Preservation Project, the latest work of the National Zoo, the "Picturing Old New England" exhibition at the National Museum of American Art, construction of the Discovery Center and renovation of the rotunda and mammal hall at the National Museum of Natural History, and the search for a new Secretary.

### *Museum on Main Street*

When the Smithsonian comes to town, exciting things happen—especially when the impetus is Museum on Main Street. In more than 100 communities in 20 states, Museum on Main Street has inspired creative programs, unprecedented volunteerism, generous local philanthropy, and ambitious capital improvements. The partnership joins the Smithsonian Institution Traveling Exhibition Service (SITES), the Federation of State Humanities Councils, individual state humanities councils, and rural museums in a collaborative effort to serve rural audiences and promote professional growth in small cultural institutions.

This year, Museum on Main Street received a generous grant from the John S. and James L. Knight Foundation to support the development and tour of the program's third exhibition. "Yesterday's Tomorrows: Past Visions of the American Future," which explores the ways we have envisioned our future since the late nineteenth century, will begin touring in 2001. The first two exhibitions capitalized on small-town local history: "Produce for Victory: Posters on the American Home Front, 1941 to 1945" and "Barn Again! Celebrating an American Icon."

A significant legacy of Museum on Main Street is the opportunity for professional development. SITES provides staff assistance in exhibit management and object care. The state

humanities councils train rural organizers in program planning and proposal writing. Working with in-state scholar teams, the humanities councils also help museums prepare exhibition-related events for and about their communities.

Gary Burger, director of the Knight Foundation's Arts and Culture Program, observes that Museum on Main Street "brings quality exhibitions to underserved communities, helps strengthen the programmatic and educational capabilities of rural institutions, and builds collaborative networks—all at a very reasonable cost." For SITES, Museum on Main Street exemplifies the fulfillment of its mission: to extend Smithsonian collections, research, and exhibitions to communities across the nation.

### *Eberly Family Charitable Trust Honored by Smithsonian Society*

Since 1978, the James Smithsonian Society has presented its Founder Medal to members of the society who have provided extraordinary support for Smithsonian programs and initiatives that they feel most passionate about. This year's recipient, The Eberly Family Charitable Trust, exemplifies the tradition of individual giving, through annual memberships and gifts throughout the year, that distinguishes previous medalists.

The trust's recent pledge of \$1.4 million will be applied primarily toward creating a center for learning about earth sciences, the Eberly Minerals and Gems Gallery in the National Museum of Natural History. The gallery will be an appropriate tribute to the family's strong interest in education—the primary focus of its philanthropy—and to its involvement in the mining and gas industry.

Through The Eberly Foundation and The Eberly Family Charitable Trust, the family has been a loyal supporter of the Smithsonian. The foundation, established through the efforts of Orville Eberly, is a longstanding member of the James Smithsonian Society. Family members have always been actively involved in the administration of both organizations. Robert E. Eberly Sr., who currently heads the family philanthropies, accepted the Founder Medal on behalf of the trust at the Smithsonian Society's annual dinner on May 21, 1999.

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 William E. Harkins, *tai* (sea bream) and sake bottles, by Ogata Gekkō (1859–1920), Japan, early 1900s, woodblock print, ink on paper (S1998.301)

\* In Memoriam



- William E. Harkins, *Carp and Wisteria*, by Ogata Gekkō (1859–1920), Japan, early 1900s, woodblock print, ink on paper (S1998.302)
- William E. Harkins, *Dragonfly with Blossoming Squash*, by Ogata Gekkō (1859–1920), Japan, ca. 1900, woodblock print, ink on paper (S1998.303)
- William E. Harkins, print from the series *Bijn hana kisou*, by Ogata Gekkō (1859–1920), Japan, 1897, woodblock print, ink on paper (S1998.304)
- William E. Harkins, *Woman and child*, by Mizuno Toshikata (1866–1908), Japan, 1892, woodblock print, ink on paper (S1998.305)
- William E. Harkins, *Railroad train passing by Takanawa*, by Kawabata Gyokushō (1842–1913), Japan, 1890–1900, woodblock print, ink on paper (S1998.306)
- Osborne and Gratia Hauge, group of forty-nine vessels, Iran, 5th–1st millennium B.C., earthenware (S1998.161B.209)
- Gift of Victor and Takako Hauge, group of twenty-seven vessels, Iran and Iraq, 5th–1st millennium B.C., earthenware (S1998.309B.335)
- Ikuta Koji, *A drop of water*, by Ikuta Koji (born 1953), Japan, 1986, mezzotint, ink on paper (S1998.211)
- Ikuta Koji, *Leaves entwined in wood*, by Ikuta Koji (born 1953), Japan, 1988, mezzotint, ink on paper (S1998.212)
- Ikuta Koji, *Interaction*, by Ikuta Koji (born 1953), Japan, 1991, mezzotint, ink on paper (S1998.213)
- Ambassador and Mrs. Donald Johnson, group of seven tea or *kumiss* bowls, Mongolia, 19th–20th century, wood and silver (S1999.10–.16)
- Kruglak family in memory of Amy and Ted Kruglak, *Washington Monument (Potomac Riverbank)*, by Kawase Hasui (1883–1957), Japan, 1935, woodblock print, ink on paper (S1998.159)
- Kubo Takuma, *Scorpion*, by Kubo Takuma (born 1948), Japan, 1986, engraving, ink on paper, (S1999.9)
- Adrienne Manikin, group of nineteen folio pages, drawings and paintings, Iran, Egypt, India and Tibet, 14th–19th century, ink, color, and gold on paper (S1998.214–.218; S1998.226–.233; S1999.3–.5)
- Adrienne Manikin, group of seven dishes, Iran and Central Asia, 17th–19th century, glazed earthenware (S1998.219B.225)
- Gift of Chieko and Tetsuya Ogawa, Iga vase, by Takahashi Rakusai III (1898–1976), Japan, ca. 1940, Shigaraki ware, earthenware (S1998.157)
- H. Ed Robison, Group of sixty prints, by Yoshida Hiroshi (1876–1950), Japan, 1920–30, woodblock prints, ink on paper (S1998.234–.292; S1999.117)
- The Elizabeth Woodbury collection of prints from Meiji Japan, group of ninety-four prints, by various artists, Japan, Meiji era (1868–1912), woodblock print, ink and color on paper (S1999.22–.115)
- Capt. and Mrs. R. Zimmermann, *Seascape*, by Yoshida Hiroshi (1876–1950), Japan, ca. 1900, watercolor on paper (S1998.308)
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- Sweet Memories Farm. Dried herbs and flowers for the New Hampshire program, Smithsonian Folklife Festival.
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- Tourmobile Sightseeing. Tour of Washington, D.C. sites for the participants of the Smithsonian Folklife Festival.
- Utz Quality Foods, Inc. Cheese curls for staff at the Smithsonian Folklife Festival.
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Hans Kaufhold, carved granite in the shape of the state of New Hampshire.  
Romania, Vicsoreanu plate from Horezu Village, Vâlcea District.  
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Alan and Monah L. Gettner in memory of Carl Lawrence; Candleholder, designed by George Sakier, 1930s; 1998-40-1.

Warren A. James; Camera “Kodak Pocket Instamatic 10,” manufactured by Eastman Kodak; produced 1973–1976; 1998-41-1a,b.  
Pentagram; Poster “The Big A,” designed by Paula Scher, 1991; 1998-42-1.  
K. G. Olsson; Four posters; designed by Karl Gustav Olsson; 1990–95; 1998-43-1/4.  
James Howard Fraser; Eighteen posters, various designers, 20th century; 1998-44-1/18.  
Raphael Rivera Rosa; Poster “Betances,” designed by Raphael Rivera Rosa, 1987; 1998-45-1.  
Christine Viennet; Platter, designed by Christine Viennet, 1997; 1998-46-1.  
Georg Jensen; Cutlery “Vivianna,” designed by Vivianna Torun Bulow-Hube, introduced 1997; 1998-47-1/15.  
Anonymous; Light “Ventosa,” designed by Achille and Pier Giacomo Castiglioni, introduced 1962; 1998-48-1.  
Glenn Loney; Shopping bag “Progress, Kino fur Kinder,” designed by Glenn Loney, 20th century; 1998-49-1.  
Carolle Thibaut-Pomerantz; Two designs for wallpaper, unknown French, 1925; and twelve wallcoverings, unknown French and Italian, 1775–1900; 1998-62-1,2; 1998-62-3/14.  
Victor Wiener; Forty-nine ceramic tablewares such as dishes, trays, teapots, bowls, various German manufacturers, 1910–1930; 1998-63-1/49.  
Thomas F. O’Malley; Eleven examples of letterhead, various unknown American designers; 20th century; 1998-64-1/11.  
Ashton Hawkins; 2 lithographs, made by Joseph Nash, 19th century; 1998-65-1,2.  
Elizabeth Dow Ltd; Fifteen sidewalls, designed by Elizabeth Dow, 1998; 1998-66-1/15.  
Mrs. Henry L. Thompson; Tape lace pattern, maker unknown, early 20th century; 1998-67-1.  
Irving S. Richards; Vase, made by Marcello Fantoni, 1950s; 1998-68-1.

Dansk International Designs, Ltd;  
Sixteen pieces of cutlery, designed  
by Gerald Gulotta, 1989–1998;  
1998-69-1/16.

Radoslav L. and Elaine F. Sutnar; Two  
posters, designed by Ladislav  
Sutnar, 20th century; 1998-70-1/3.

Alphons and Anita S. Bach; Three  
blueprints, designed by Alphons  
Bach, and one hundred and sixty-  
seven designs for furniture;  
designed by Henry Dreyfuss,  
1940s; 1998-71-1; 1998-71-2/168.

Luminator Aircraft Products;  
Publicity booklet, designed by  
Luminator Aircraft Products, 1938;  
1998-72-1.

James M. Connor; Miscellaneous  
material for Henry Dreyfus  
Archive, 1954–1965 and fourteen  
drawings by James M. Connor,  
20th century; 1998-73-1; Archives;  
1998-73-2/15.

Seymour Chwast; Sixteen pamphlets  
and one poster, designed by  
Seymour Chwast; 1954–1976;  
1998-74-1/17.

The Museum at The Fashion Institute  
of Technology; Two hundred and  
eleven wallcoverings; various  
designers, 1780–1959; 1998-75-  
1 211.

Cooper-Hewitt, National Design  
Museum Shop; Bowl, platter, cup  
and saucer “Arkadia,” designed by  
Trude Petri, introduced 1938;  
1998-76-1/3a,b.

Cooper-Hewitt, National Design  
Museum Library; Invitation, maker  
unknown, n.d.; 1998-77-1.

Cooper-Hewitt, National Design  
Museum Library; Poster “Sutnar  
Visual Design in Action,” designed  
by Ladislav Sutnar, n.d.; 1998-78-1.

Susumu Sakan; One hundred and sixty  
wallcoverings and three sample  
books, maker unknown, 1990–  
1995; 1998-79-1/163.

Cooper-Hewitt, National Design  
Museum Library; Forty examples of  
stationary, various designers, 1987;  
1998-80-1/40.

Found in Museum, unsolicited gift;  
Invitation, designed by Gaetano  
Pesce, 1997; 1998-81-1.

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Judith Godwin, *Red Monument*. 1960, oil on canvas, by Gerald Nordland (HMSG.99.43)  
Joe Shannon, *Self-Portrait at 66*. 1996, graphite and charcoal on paper, by Olga and Joseph H. Hirshhorn Foundation (HMSG.99.42)  
Robert Goodnough, *Civilized Cavewoman*. 1998–99, acrylic on canvas, by Robert Goodnough (HMSG.99.41)  
Kendall Buster, *Untitled Studies for HMSG installation*. 1982, by Martin A. Funk and Eugene S. Zimmer (HMSG.99.37)  
Jan Frank, *Goodby Bill*. 1997, oil, ink and alkyd on paperboard mounted on wood, by The Hassam Purchase Fund, American Academy and

Institute of Arts and Letters (HMSG.99.30)  
Richard Stankiewicz, *Untitled #28*, 1960, ink on rice paper, by the Richard Stankiewicz Estate (HMSG.99.25)  
Richard Stankiewicz, *Untitled*, 1960, ink on rice paper, by the Richard Stankiewicz Estate (HMSG.99.26)  
Athena Tacha, *Land Marks*, 1984, ink, oil pastel & pencil on paper mounted on foamcore, by Athena Tacha (HMSG.99.31)  
Athena Tacha, *Land Marks (site map)*, 1983, ink, oak leaves on blueprint map and mylar, by Athena Tacha (HMSG.99.32)  
Ernest Briggs, *Untitled*, 1953, oil on canvas, by Linda Dugmore Shannon (HMSG.99.29)

## National Museum of African Art

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William F. Brodnax III, maternity apron, late 19th–early 20th century, Zulu peoples, South Africa (99-6-2)  
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- William F. Brodnax III, snuff container, late 19th–early 20th century, Zulu peoples, South Africa (99-6-4)
- William F. Brodnax III, a collection of beaded work costume accessories, late 19th–early 20th century, Zulu peoples, South Africa (99-6-5-9)
- William F. Brodnax III, two bracelets, late 19th–early 20th century, Zulu peoples, South Africa (99-6-10, 11)
- William F. Brodnax III, three bands, late 19th–early 20th century, Zulu peoples, South Africa (99-6-12)
- William F. Brodnax III, four necklaces, late 19th–early 20th century, Zulu peoples, South Africa (99-6-15 through 99-6-18)
- William F. Brodnax III, two bracelets, late 19th–early 20th century, Zulu peoples, South Africa (99-6-19.1, 99-6-19.2)
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- William F. Brodnax III, two necklaces, late 19th–early 20th century, Zulu peoples, South Africa (99-6-21, 22)
- William F. Brodnax, two bracelets, late 19th–early 20th century, Zulu peoples, South Africa (99-6-23.1, 23.2)
- William F. Brodnax III, necklace, late 19th–early 20th century, Zulu peoples, South Africa (99-6-24)
- Sarah McKee Burnside from the George T. McKee Collection, cloth, Shoowa peoples, Democratic Republic of the Congo (98-22-1)
- Sarah McKee Burnside from the George T. McKee Collection, cloth, Kuba peoples, Democratic Republic of the Congo (98-22-2)
- William G. Dakin, *Oberokpa Va'yeroye*, 1972, deep etching on paper, by Bruce Onobrakpeya (98-23-1)
- Allan Frumkin, figure, late 19th–mid-20th century, Bangwa peoples, Cameroon (98-26-1)
- Allan Frumkin, figure, late 19th–early 20th century, Yanzi peoples, Democratic Republic of the Congo (98-26-2)
- Allan Frumkin, female figure (nkisi), late 19th–early 20th century, Kongo peoples, Democratic Republic of the Congo (98-26-3)
- Allan Frumkin, female figure, 19th–early 20th century, Yoruba peoples, Nigeria (98-26-4)
- Mona Gavigan in memory of Philip L. Ravenhill, prestige vessel, Nupe peoples, Nigeria (98-24-1)
- Denyse and Marc Ginzberg, shield, early 19th–early 20th century, Amhara peoples, Ethiopia (98-21-1).
- Bequest of Bernice M. Kelly, *Uli Notes*, 1991, watercolor on paper, by A. Omorayo (Tayo) Adenaike (98-20-1).
- Bequest of Bernice M. Kelly, *Aye Rovwa Amwa Iblu Rbno*, 1988, etching with pastel on paper, by Bruce Onobrakpeya (98-20-2)
- Bequest of Bernice M. Kelly, *Eclipse*, 1967, deep etching on paper, by Bruce Onobrakpeya (98-20-3)
- Bequest of Bernice M. Kelly, *Leopard in a Cornfield III*, 1984, by Bruce Onobrakpeya (98-20-4)
- Bequest of Bernice M. Kelly, *Dancing Masquerader II*, 1967, by Bruce Onobrakpeya (98-20-5)
- Bequest of Bernice M. Kelly, *City in the Moon*, 1960s, woodcut on paper, by Adebisi Fabunmi (98-20-6)
- Bequest of Bernice M. Kelly, *Road to Abuja*, 1982, offset lithograph on paper, by Obiora Udechukwu (98-20-7)
- Reynold C. Kerr in memory of Sylvia H. Williams, funerary object (bwoongitool), late 19th–early 20th century, Kuba peoples, Democratic Republic of the Congo (99-5-1)
- Michael Oliver, cane, 1950s, Zulu peoples, South Africa (99-4-3)
- Contemporary African Art Gallery, New York, *Dying Beast*, 1993–1994, ink on paper, by Ezrom Legae (98-27-1)
- Contemporary African Art Gallery, New York, *Icon de Dekar*, 1993–1994, ink on paper, by Ezrom Legae (98-27-2)
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- Anne and Ronald Abramson (and Vera and Robert Loeffler, Elmerina and Paul Parkman, and Maurice Littleton Gallery). *Dress for Success*, 1997, fired enamels on sandblasted glass and found objects, by Susie Krasnican (1999.48a-vv)
- Josef and Anni Albers Foundation. *Black/White Hanging*, 1948, cotton double weave with leno, by Lore Lindenfeld (1998.107)
- Cissy and John Anderson. *Hanged Man*, 1955, woodcut, by Leonard Baskin (1999.47)
- Anonymous donor. *Executive Shirt*, 1996, sterling silver, brass and plexiglas, by Richard Mafong (1998.103)
- Anonymous gift in honor of the artist's mother, Kay Wade. *Wasbdai Miracle*, 1997, glazed porcelain, by Susan Thayer (1998.124)
- Anonymous donor. *Untitled (small basket)*, ca. 1900, woven fibers, by Unidentified Artist (1998.150)
- Anonymous donor. *The French Were Here (Quebec, Port-au-Prince, Fez)*, 1994–1995, sequins, beads, fabric, tracing paper, glitter, watercolor, collage, colored pencil, lithographs, etchings on paper, by Joyce Kozloff (1998.153)
- Anonymous donor. *Robert Cottingham*, 1986, silver gelatin print mounted on board, by Harvey Stein (1998.154)
- Diane Banks in honor of Matthew Moss. *Blue Cone*, 1997, wood, glue, paint, ink, and metallic powders, by Diane Banks (1998.76.1)
- Diane Banks in honor of Sarah Moss. *Red Cone*, 1996, bamboo, tarlatan, glue, ink and thread, by Diane Banks (1998.76.2)
- Suzan Benze in honor of Jean O. Boutz. *Cobalt Goddess Medallion with Pair of Jeweled Chalice*, 1999, blown, lampworked and modeled lampworked colored glass, by Donovan Boutz; *Dancing Red Elephant Chalice*, 1999, blown, lampworked and modeled lampworked colored glass, by Donovan Boutz; *Salmon Chalice*, 1999, blown, lampworked and modeled lampworked colored glass, by Donovan Boutz (1999.22.1-.3)
- Robert L. Bliss. *Cradle for a Young Viking/Viqueen*, 1997, tung oil finished Baltic birch plywood and brass, by Robert L. Bliss; *Deep Cradle Rocker*, 1992, aluminum, leather, black Brazilian granite, by Robert L. Bliss (1999.46.1-.2)
- Helen Bock (and Mobilia Gallery). *Nightingales*, 1994, fine silver, sterling silver, 18k gold, by Daniel Jocz (1999.53)
- Fleur and Charles Bresler. *Glancing Figure*, 1997, turned walnut, by Mark Sfirri (1998.137)
- Fleur Bresler. *Table Bracelet: "Promenade Suite"*, 1997, maple, birch, cherry, brass, by Michelle Holzapfel (1999.8)
- Ms. Aimee Brown (and Professor Monroe Price). *El Fireboy y El Mingo*, 1988, color lithograph on paper, by Gilbert "Magu" Lujan (1998.147)
- Irena F. Brynner. *Brooch*, 1969, 18k gold and Egyptian faience, by Irena F. Brynner (1999.52)
- Beverly Camenson in honor of Mrs. William Taubin. (*Woman in Kitchen*) from series: *You Don't Have to be Jewish to Love Levy's*, ca. 1967, offset lithograph, by William Taubin (art director); (*Native American*) from the series *You Don't Have to be Jewish to Love Levy's*, ca. 1967, offset lithograph, by William Taubin (art director) (1999.34.1-.3)
- Dr. and Mrs. Jerome Canter. *Untitled*, acrylic on paper, by Willem De Looper (1998.142.1); 7 *Untitled* prints from portfolio *Urban Landscapes #2*, silkscreen print, by Richard Estes (1998.142.2.1-.7); 5 *Untitled* prints from portfolio *Urban Landscapes #3*, silkscreen print, by Richard Estes (1998.142.3.1-.5)
- Cavin-Morris Gallery, gift of a friend of Herbert Waide Hemphill, Jr. *Hurricane*, 1973, watercolor and ink on paper, by Peter Mitchell (1998.123)
- Dale Chihuly. *600-D*, 1994, glass and mixed media, by Walter Zimmerman (1999.49)
- Jonathan Cohen (and Eleanor Friedman). *Spike*, 1998, apple prunings doveled with vinyl-coated nails, by Gyongy Laky (1998.143)
- Theodore Cohen in memory of his mother and her sisters: Rose Melmon Cohen, Blanche Melmon, Mary Melmon Greenberg and Fanny Melmon Liberman. 24 craft objects, various dates, various media, by various artists (1998.122.1-.24)
- Columbus Museum, Georgia, gift by exchange. 23 prints, various dates, lithographs, by Lamar Baker (1998.115.1-.23)
- Judith Kogod Colwell. *Leaf Platter*, 1998, underglazed and glazed wheel-thrown terra cotta clay, by Judith Kogod Colwell (1999.19)
- Martha and Pat Connell. *Timeless Watch: Neighborhood Watch*, 1992, 18k gold, titanium and leather, by Harold O'Connor (1998.146)
- Consolidated Natural Gas Company Foundation. *Heirs Come To Pass*, 3, 1991, silver-dye bleach print made from digitally assisted montages, by Martina Lopez (1998.85); *Camera Obscura Image of Manhattan View Looking West in Empty Room*, 1996, gelatin silver print, by Abelardo Morrell (1998.159)



- Ann D. Cousins. *Self-Portrait without Skin*, 1997, 14k gold with platinum and rubellite tourmaline cabochon, by Kim Eric Lilot (1998.80); *Gold Skimmer*, 1983, porcelain enamel on steel with gold, by Keith Appel (1998.81)
- Carole-Ann and Grant Davies. *Porcelain Platter*, 1997, underglazed and stained porcelain, by Hunt Prothro (1998.108)
- David L. Davies (and John D. Weeden). *Band Saw Box*, ca. 1968, California black walnut, by Arthur Espenet Carpenter (1998.130)
- Nancy Negus Denhart. *Après Moi Le Deluge*, 1974, serigraph on paper, by Walter Iler (1998.125)
- Martin and Hariette Diamond. *Jacob Wrestling with the Angel*, 1936, pencil on paper, by Hananiah Harari (1998.93)
- Ella D. Dibrell (and Edmund Montgomery). *Lady MacBeth*, 1905, marble, by Elizabeth Ney (1998.79)
- Jim F. Dicke II. *Untitled*, 1997, iris print photograph, by Jim F. Dicke II (1999.50)
- Mary Douglas. *Monument Valley Plate*, 1986, repousse and chased 18 gauge copper sheet and oil paint, by Mary Douglas; *Yosemite Plate*, 1987, repousse and chased 18 gauge copper sheet and oil paint, by Mary Douglas; *North American Plate*, 1990, repousse and chased 18 gauge copper sheet and oil paint, by Mary Douglas (1998.113.1-3)
- Frank and Maye Eagle. *Prairie Patriarch*, 1999, patinated bronze, by Robert Deurloo (1999.36)
- Robert Ebendorf. *Hair Ornament*, 1960, silver and plique-à-jour enamel, by Robert Ebendorf (1998.117)
- Ferranti family in memory of David Ferranti. *Four Brooches*, 1996, sterling silver, glass and graphite, by David Ferranti (1999.24a-d)
- Eleanor Friedman (and Jonathan Cohen). *Spike*, 1998, apple prunings doweled with vinyl-coated nails, by Gyongy Laky (1998.143)
- Friends of the artist. *Decline*, 1997, linen, embroidery, thread, glass beads, and acrylic paint, by Karin Birch; *Night Sky*, 1997, linen, embroidery thread, glass beads, acrylic paint, by Karin Birch; *Mapping Territories*, 1996, linen, embroidery thread, glass beads, acrylic paint, by Karin Birch (1998.127.1-3)
- Gary Genetti. *Covered Jar with Elephants*, 1999, incalmo blown and sandblasted etched glass, by Gary Genetti (1999.45)
- Helen S. Golden. *Two Magnolias*, 1997, digital print, by Helen Golden (1998.157)
- Ellin and Baron Gordon in memory of Herbert Waide Hemphill, Jr. *Adam and Eve*, 1998, sandstone, by Tim Lewis (1999.44)
- Stephen Hannock in honor of James F. Dicke II. *Flooded Canyon: Clear Light at Yellowstone*, 1997, polished oil on canvas, by Stephen Hannock (1998.138)
- Haynes Family, Jorge, Roxanne, Rebecca and Ben. *Cesar Chavez*, pencil on paper, by Emanuel Martinez (1998.155)
- Alice C. Heilman (and Louis Heilman, and Lawrence Wise and in honor of Annetta Wise and Philip Weber in honor of his parents, Bernice and Gerald Weber, and Beverly Heilman Wise and Alan Wise in memory of their parents). *Space Probe*, 1998, Pacific yew wood and suede, by Philip Weber; *Oval*, 1998, Pacific yew wood, Honduras rosewood, picture jasper, and suede, by Philip Weber; *Inner Wisdom 67-87*, 1998, ebony, brass and steel, by Philip Weber (1998.78.1-3)
- Louis Heilman (and Lawrence Wise and in honor of Annetta Wise and Philip Weber in honor of his parents, Bernice and Gerald Weber, and Beverly Heilman Wise and Alan Wise in memory of their parents and Alice C. Heilman). *Space Probe*, 1998, Pacific yew wood and suede, by Philip Weber; *Oval*, 1998, Pacific yew wood, Honduras rosewood, picture jasper, and suede, by Philip Weber; *Inner Wisdom 67-87*, 1998, ebony, brass and steel, by Philip Weber (1998.78.1-3)
- Herbert Waide Hemphill, Jr. 67 folk art objects, various dates, various media, by various artists (1998.84.1-67)
- Delwyn and Judy Herbert. *Aleutian Canada Geese (rig of three geese)*, 1999, carved tupelo wood and acrylic paint, by Delwyn Herbert (1999.61a-c)
- John and Robyn Horn. *Trio*, 1999, dogwood and steel, by Stoney Lamar (1999.55); *Five Individuals*, 1998, turned and carved cherry and ash, by Jack R. Slentz (1999.60a-e)
- Charles Isaacs (and Carol Nigro). *Self-Portrait*, ca. 1855, salted paper print, by O. H. Willard (1999.41)
- Girard Jackson. *Hot Chocolates*, ca. 1919-28, oil on canvas, by Theresa Bernstein (1998.128)
- James Renwick Alliance. *Dining Chair*, 1993, blackened imbuya wood and silk, by Kristina Madsen (1998.82); *Vessel #2 I 17*, 1995, electroformed, sandblasted, oxidized, and enameled copper foil, by June Schwarcz (1999.2.1); *Mother Lode*, 1997, fabricated and constructed 18k gold, glass vials with gold dust suspended in alcohol and velvet-lined maple box, by Sandra Enterline (1999.2.2); *Radish Salad Bowl*, 1998, turned, carved, and painted wood, by Craig Nutt (1999.5); *Anton's Flowers*, 1997, thrown, handbuilt, carved, low-fired, underglazed and glazed earthenware, by Eddie Dominguez (1999.10); *Blue Pearl*, 1998, fired ceramic and acrylic, by Kenneth Price (1999.37); *The Listening Point*, 1999, photosensitive cast glass and black pate de verre, by Mary Van Cline (1999.38); *iGuerra!*, 1993, hand and machine stitched, flag, fabric, netting, paint, plastic skeletons, cloth letters, colored and monofilament threads, nylon rope, rayon fringe, eyelets and Velcro, by Arturo Alonzo Sandoval (1999.42)
- Mickey Johnston in honor of Professor Robert Ebendorf. *Bang-le Bracelet*, 1997, hand-forged, steel, gold, diamonds, and pearl, by Mickey Johnston (1999.35)
- Betty Kasson in memory of Michael Kasson. *Pink Stem*, 1998, sterling silver and epoxy resin with pigments, by Susan Sloan (1998.101)
- Susan and Neil Kaye. *Vestiges of Society. Warm and Open Hearts*, 1997, mixed

- media, by David McCarthy (1998.91)
- Martha Killebrew. *Sunset Temple*, 1997, raku-fired porcelain, by Gail Bakutis (1998.77a&b)
- Dorothy Krause. *Lady of the Flowers*, 1997, digital collage, by Dorothy Krause (1998.109)
- Krimmel Family. *Vessel #453*, 1997, lathe-turned Colorado alabaster with satine (bloodwood), by Max Krimmel (1998.131)
- Jane M. Lamb (and William T. McLaughlin, and Karen E. Schaeffer). *Sweat of the Sun, Tears of the Moon*, 1989, hand-quilted, machine-pieced and reverse-appliqued cotton, polyester, rayon, by Teresa Barkley (1998.112)
- L. Douglas and Barbara Lee. *Opaline Exterior Fold Set*, 1998, blown glass, by Benjamin Moore (1998.141a-c)
- Arthur J. Levin in memory of his beloved wife Edith. *Ocean Park, No. 6*, 1968, oil on canvas, by Richard Diebenkorn (1999.17)
- Mr. and Mrs. Brian Leyden. *Alaric—King of the Visigoths*, 1998, crown stag deer antler with 14k gold, sterling silver, copper, buffalo horn, mammoth ivory, mother-of-pearl, sapphire fittings, Damascus steel, Prehnite mineral specimen, thuya wood burl, and walnut, by Larry Fuegen (1998.132)
- Bonny Lhotka. *Hive*, 1997, digital print, by Bonny Lhotka (1998.158)
- Lore Lindenfeld. *Totem*, 1981, woven, interlaced and looped cotton, wool, chenille, and ribbons, by Lore Lindenfeld (1999.1)
- Alan Lipton. *Untitled*, ca. 1946, pencil on paper, by Seymour Lipton; *Untitled*, ca. 1946, pencil on paper, by Seymour Lipton (1998.139.1-2)
- Herta and Hans Loeser in honor of Michael W. Monroe. *Bowl*, 1996-1998, wheel-thrown porcelain, by Anne Smith (1999.13)
- Mark R. Matthews and family in honor of Francis M. Greenwell. Eleven works, 1999, hot glass and Graal technique, by Mark R. Matthews (1999.21.1-11)
- David M. Maxfield. *Rhizome*, 1998, linoleum cut, by Terry Winters (1998.129); *Dobles*, lithograph and chine colle, by Jose Bedia (1999.40)
- William T. McLaughlin (and Karen E. Schaeffer and Jane M. Lamb). *Sweat of the Sun, Tears of the Moon*, 1989, hand-quilted, machine-pieced and reverse-appliqued cotton, polyester, rayon, by Teresa Barkley (1998.112)
- Patricia Smith Melton. 34 vintage quilts and 11 vintage textile fragments, various dates, various media, by various artists (1998.149.1-45)
- Mobilia Gallery. *Double Ring*, 1998, lapis lazuli and 18k gold, by Harold O'Connor; *Ring*, 1998, silver, 18k gold, granulation, by Harold O'Connor; *Brooch*, 1998, silver, 18k gold, river rock, granulation, by Harold O'Connor; *Necklace*, 1998, silver and spectrolite, by Harold O'Connor (1998.111.1-4); *Tribute*, 1997, silver, fine silver, beads, and polymer, by Judy Mulford (1998.145)
- Mobilia Gallery (and Helen Bock). *Nightingales*, 1994, fine silver, sterling silver, 18k gold, by Daniel Jocz (1999.53)
- Judith Moncrieff. *Façade*, 1997, digital print, by Judith Moncrieff (1998.99)
- Edmund Montgomery (and Ella D. Dibrell). *Lady MacBeth*, 1905, marble, by Elizabeth Ney (1998.79)
- Amy Morgan, Morgan Contemporary Glass. *Untitled #HO-IV-13 (set of three)*, 1999, blown glass, by John Leighton (1999.43a-c)
- Jesus Bautista Moroles. *Georgia Stele*, 1999, Georgia gray granite, by Jesus Bautista Moroles (1999.25)
- Carol Nigro (and Charles Isaacs). *Self-Portrait*, ca. 1855, salted paper print, by O. H. Willard (1999.41)
- Masuo Ojima in honor of friends. *Triptych*, 1998, glazed stoneware, by Masuo Ojima (1999.32a-c)
- Marilyn and Paul O'Rourke (and The Society of Arts and Crafts). *Upholstered Chair*, 1996, walnut burl veneer, plywood, leather, by Dale Broholm (1998.114)
- A. Rudy Padilla, The Hourglass Prison Art Museum. 23 drawings, various dates, drawing on cotton and paper, by various artists (1998.126.1a-23b)
- Irving Penn. *Vladimir Nabokov, North Italy (Chasing Butterflies)*, 1966, silver print on paper mounted on paperboard, by Irving Penn (1998.105)
- Perkins Center for the Art made possible by the Bogen Photo. *Bicycle Shop Boys, Kula, Turkey*, 1997, silver print, by Todd Swimmer (1998.116); *Untitled, New York*, 1997, carbro print, by Aristidis Kyriazis (1999.31)
- Mary L. Pierce. *Dinner at Aunt Tilly's*, 1994, machine-pieced, appliqued, and quilted cotton and cotton-blend fabrics with polyester batting, by Sue Pierce (1999.59)
- Anthony T. Podesta. *Untitled*, natural, painted and stained wood, by Yumiko Yamaguchi (1998.152)
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- Morris and Rita Pynoos, partial and promised gift. *Mirror II*, 1971-73, cast bronze and mirror, by Robert Graham (1998.133)
- Henry Ward Ranger through the National Academy of Design, bequest of. *Spring Way*, 1964, watercolor and collage, by Romare Bearden (1999.9); *Contrasting Textures*, oil on canvas, by Luigi Lucioni (1999.14); *Lake Erie Shore*, 1961, oil on canvas, by Werner Groshans (1999.16)
- Mr. and Mrs. James Rapp. *Shaded Stripes*, ca. 1970-71, double plain weave linen, by Richard Landis (1998.144)
- Elizabeth A. Rose. *Necklace*, 1917, sterling silver with blue enamels and opal, by Augustus F. Rose (1999.51)
- Eleanor T. and Samuel J. Rosenfeld. *Teapot*, 1998, glazed stoneware and metal, by Byron Temple (1998.110.1); *The Stacking Bowls*, 1998, glazed porcelain, by Peter Beasecker (1998.110.2a-c); *Forbidden Fruit with Leaf*, 1998, glazed porcelain, by Keisuke Mizuno (1999.12)
- Karen E. Schaeffer (and Jane M. Lamb, and William T. McLaughlin). *Sweat of the Sun, Tears of the Moon*, 1989, hand-quilted, machine-pieced and reverse-

- applied cotton, polyester, rayon, by Teresa Barkley (1998.112)
- John Sennhauser, bequest of. *Black Forms in Colorspace #2*, 1946, oil on canvas, by John Sennhauser (1998.151)
- Mr. and Mrs. Dominic F. Shortino. *Peculiar Poetry 4*, 1993, cotton and silk organza, by Dominic Nash (1998.140)
- Smithsonian Associates. *Fragile Crossing*, 1992, serigraph on paper, by Luis Cruz Azaceta (1998.102)
- The Society of Arts and Crafts (and Marilyn and Paul O'Rourke). *Upholstered Chair*, 1996, walnut burl veneer, plywood, leather, by Dale Broholm (1998.114)
- Marvin J. and Shirley F. Sonosky, in memory of Harryette Cohen. *Indians in Council, California*, ca. 1872, oil, by Albert Bierstadt (1998.148)
- Mary Elizabeth Spencer, bequest of. 87 miniatures, watercolor on ivory, by various artists (1999.27.1-.94)
- Christopher Staley in honor of his parents. *Nesting Bowls*, 1998, thrown and altered porcelain, by Christopher Staley (1999.20a-c)
- David Steinberg. *RED READ*, 1998, portfolio of five lithograph and silkscreen works, by Ken Aptekar (1998.104.1-.5)
- Michael Sterling in honor of Vanessa, Janna and Tyler. *Chair*, 1995, oiled, lacquered, and hand-rubbed caroa walnut, macassar ebony, by Michael Sterling (1998.73)
- Gene Thornton. *Mattress, North Philadelphia, PA*, silver print, by Lewis Downey (1999.54)
- Kenneth R. Trapp. *Pineapple Basket*, 1997, sweet grass and split brown ash, by Irene McDonald (1998.83); *Beaked Pitcher*, 1998, glazed stoneware, by Jeff Oestreich; *Fish Dish*, 1998, glazed stoneware, by Jeff Oestreich; *Ewer*, 1998, glazed stoneware, by Jeff Oestreich (1998.100.1-.3); *Baldguy and Docking Station*, 1999, fabricated sterling silver, cloisonne enamel, ivory, black onyx, painted wood and steel, by Heinz Brummel (1999.63a,b)
- Kenneth R. Trapp in memory of Thomas Hume Slater, Jr. *Venetian Style Goblet (red wine)*, 1998, blown glass, by Alan Goldfarb; *Venetian Style Goblet (champagne flute)*, 1998, blown glass, by Alan Goldfarb; *Venetian Style Goblet (cordial)*, 1998, blown glass, by Alan Goldfarb; *Venetian Style Goblet (printed forest glass beaker)*, 1998, blown glass, by Alan Goldfarb; *Venetian Style Goblet (raspberry printed beaker)*, 1998, blown glass, by Alan Goldfarb (1999.6.1-.5)
- Kenneth R. Trapp in honor of Eleanor T. and Samuel J. Rosenfeld. *Teapot*, 1998, glazed stoneware, by Jane Shellenbarger (1999.15)
- University of Tennessee, Knoxville Print Workshop. 27 prints from the portfolio *Drawn to Stone*, lithographs, by various artists (1998.156.1-.27)
- Peggy Stieler Wahrmond. *Metamorphosis II*, 1990-1991, cotton, by Peggy Stieler Wahrmond (1998.95)
- Chun Wen Wang. *Firing God*, porcelain, by Chun Wen Wang (1998.119)
- Philip Weber in honor of his parents, Bernice and Gerald Weber (and gift of Beverly Heilman Wise and Alan Wise in memory of their parents, Alice C. Heilman, Louis Heilman and Lawrence Wise and in honor of Annetta Wise). *Space Probe*, 1998, Pacific yew wood and suede, by Philip Weber; *Oval*, 1998, Pacific yew wood, Honduras rosewood, picture jasper, and suede, by Philip Weber; *Inner Wisdom 67-87*, 1998, ebony, brass and steel, by Philip Weber (1998.78.1-3)
- John D. Weeden (and David L. Davies). *Band Saw Box*, ca. 1968, California black walnut, by Arthur Espenet Carpenter (1998.130)
- Newton D. Werner. *Lippincott's, June*, poster, by Will Carqueville (1998.92)
- Cameron Whiteman. Six photos: *Saddle Peak Road—Topanga (LA1)*, 1994, platinum prints, by Madoka Takagi; *Micheltorena Street—Silverlake (LA7)*, 1994, platinum prints, by Madoka Takagi; *Vista Del Mar (LA9)*, 1995, platinum prints, by Madoka Takagi; *Charnock Road (Inglewood Blvd.)*, *Mar Vista (LA13)*, 1995, platinum prints, by Madoka Takagi; *Grandview Avenuel/Angelus—Venice (LA15)*, 1995, platinum prints, by Madoka Takagi; *Rustic Road-Pacific Palisades (LA25)*, 1995, platinum prints, by Madoka Takagi (1998.134.1-.6)
- Frederick Wiedman, Jr. in memory of Richard Mack. *EEL GIG Chair*, 1994, wood and found objects, by Daniel Mack (1999.33)
- Carol and Don Wiiken. 21 glass objects, various dates, glass and various media, by various artists (1999.57.1-.21)
- Beverly Heilman Wise and Alan Wise in memory of their parents, (and Philip Weber in honor of his parents, Bernice and Gerald Weber, and Alice C. Heilman, Louis Heilman and Lawrence Wise and in honor of Annetta Wise). *Space Probe*, 1998, Pacific yew wood and suede, by Philip Weber; *Oval*, 1998, Pacific yew wood, Honduras rosewood, picture jasper, and suede, by Philip Weber; *Inner Wisdom 67-87*, 1998, ebony, brass and steel, by Philip Weber (1998.78.1-3)
- Lawrence Wise and in honor of Annetta Wise (and Philip Weber in honor of his parents, Bernice and Gerald Weber, and gift of Beverly Heilman Wise and Alan Wise in memory of their parents, Alice C. Heilman, Louis Heilman). *Space Probe*, 1998, Pacific yew wood and suede, by Philip Weber; *Oval*, 1998, Pacific yew wood, Honduras rosewood, picture jasper, and suede, by Philip Weber; *Inner Wisdom 67-87*, 1998, ebony, brass and steel, by Philip Weber (1998.78.1-3)
- Jay Wilson. *Mandala*, 1994, hand-woven wool and linen tapestry, by Jay Wilson (1999.30)
- Dr. James H. and Jann Arrington Wolcott. 60 photographs, silver print, by Marion Post Wolcott (1998.120.1-.60)
- Anita and Ronald Wornick. *Zigurat*, 1992, turned, carved, sandblasted and bleached madrone burl, by Christian Burchard (1998.74)
- Willie Ann Wright. *Cedar Creek—Woman and Troops*, 1993, sepia-toned gelatin silver print, by Willie Ann Wright; *2nd Manasas—Women*

and *Parasols*, 1992, sepia-toned gelatin silver print, by Willie Ann Wright (1998.75.1-2)

Richard York Gallery. *Hello Steve*, 1947, hardcover book with photo silk-screens and letterpress text, by Steve Wheeler (1999.39)

## National Museum of American History

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### *Donors to the Collection*

1996 Inaugural Committee, The 53rd Presidential Inaugural (through Deborah T. Ashford): 95 pieces of documentary memorabilia including tickets, passes, invitations, leaflets, and signs (1997.0396).

ABC News, "20/20" (through Alice Pifer): 61 over-the-counter cold medications, 3 vitamin products, 2 toothbrushes, and a measuring cup, all used on a "20/20" news program about the common cold in 1981 (1998.0252).

Judith R. and Stephen F. Adler: Mirro-Matic pressure cooker received by the Adlers as a wedding present in 1951 (1999.0064).

Rita J. Adrosko: 4 prayer cards and a missal (1998.0311).

Richard E. Ahlborn: 56 Roman Catholic devotional objects from India, 1990s (1997.0401); 4 *santos* wooden carvings and a *retablo* panel painting, all from New Mexico, 1960-92 (1998.0217).

Dr. L. Thomas and Prof. Margaret G. Aldrich: wooden dividers and a Dietzgen protractor, both made for use at a classroom blackboard (1999.0117).

Alyeska Pipeline Service Company (through Jennifer Ruys): 2 steel sculptures in the shape of Alaska (1997.0228).

American Medical Women's Association, Inc. (through Eileen McGrath): 2 American Medical Women's Association banners (1999.0158).

Amherst College, Physics Laboratories (through Prof. Joel E. Gordon): 20-inch Mannheim calculating rule made by Keuffel & Esser, 1930s (1999.0254).

Paul Amos: Eastman Kodak Cine 16mm spring-driven motion picture camera, 1925 (1998.0176).

- Dorothy Anderson: 4.5 cubic feet of archival material reflecting the career of William "Cat" Anderson, a band leader, composer, and member of the Duke Ellington Orchestra (1998.3007); 24 trumpet mouth-pieces, 4 award plaques, 2 mutes, and a John Williams/Cat Anderson simulator, all used by William "Cat" Anderson (1998.3074).
- David Andrist: pair of man's trousers with an American flag motif, 1996 (1998.0330).
- DeWitt C. Armstrong IV: Sohmer & Company upright piano, 1888, piano stool, hymn book, and a watercolor portrait of Charles Crozat Converse who composed the hymn "What A Friend We Have In Jesus" (1998.0255).
- Asian Pacific American Legal Center of Southern California (through Julie A. Su): 23 garment labels, 20 sheets of business records, 4 hang tags, an envelope, and a pay stub (1997.0336).
- Thomas A. Bair II: Pickett calculating slide rule and an instruction pamphlet, 1962 (1999.0096).
- Doris I. Barker: Kodak Signet 40 camera, Kodalite Super M40 flash attachment, and a set of flashbulbs (1998.0353).
- John Barnett: fixed signal whistle board (1999.0211); 2 emergency brake signs issued by the Post Office Department for use in railroad mail cars (1999.3041).
- James E. Beckwith and Randy Sorenson: General Electric monitor top refrigerator, 1930s (1998.0264).
- Geoffrey Beene, Inc. (through Russell J. Nardoza): sweatshirt with American flag motif worn by Mr. Beene at his fall 1990 and spring 1991 clothing collection shows and a clothing box of 1998 (1998.0318).
- Howell E. Begle: 456 sound recordings (1991.0305).
- Diedra J. Bell and Dr. Stephney J. Keyser: diorama of the original Fisk Jubilee Singers based on a painting by Edmund Havel of 1873 and made by Ms. Bell assisted by Dr. Keyser, 1994-98 (1999.0174).
- Shannon A. Bell: pair of woman's yellow shoes with black polka dots designed by Norma Kamali, 1983-85 (1998.0284).
- Bradley F. and Virginia W. Bennett: 102 ancient Greek coins of Lycia and Pamphylia (1998.0317).
- Lois E. and Nancy E. Bennett: blue silk taffeta 2-piece dress worn by Grace M. Sprinkle Bennett when a teenager in 1888 (1998.0167).
- Bennington Museum (through Steve Miller): 30 pieces of English and American parian porcelain, mostly 19th century (1999.0016).
- Katherine B. Benson: 12 geometric models made by Walter Benson as an avocational geometer (1999.0130).
- Signe A. Bentley: woman's navy cotton crocheted bag with metal bead decoration, 1915-19, woman's 3-piece navy wool suit, 1925, and a pink silk handkerchief, 1925 (1998.0319).
- Don Berkebile: 35mm toy motion picture projector (1998.3053).
- Robert J. and Susan B. Bermowitz: Amprosound precision motion picture projector and a speaker, ca. 1948 (1998.0182).
- Lois M. Berney: Zippo lighter and a pen received by Ms. Berney as souvenirs of President and Mrs. Johnson's visit to Thailand, ca. 1968 (1999.0070).
- Irene Reynolds Bessette and Robert T. Reynolds: copper electrotype relief plaque of the Declaration of Independence with a floral border, made by German immigrant Peter Kuntz, 1890s (1998.0287).
- Bethlehem Steel Corporation (through Lonnie A. Arnett): 286 photographs, 23 negatives, and 2 photograph albums of operations, the control pulpit with 19 other tools and equipment items used to run the Z Mill which rolled out stainless steel, and a hard hat, safety jacket, baseball jersey, pin, and a plaque, all reflecting work and leisure activities at Washington Steel in Washington, Pennsylvania (1997.0276); 3 metal baskets used in the Welfare Room to hold workers' personal belongings at the Bethlehem Steel Mill in Bethlehem, Pennsylvania (1999.0154).
- Audrey B. Beyer: prototype photoelectric air seed sorting machine invented by Mrs. Beyer's father, Everett H. Bickley, and patented in 1929 (1999.0134); 7 cubic feet of papers documenting the career of inventor Everett H. Bickley, a Deskette clipboard, and a Fotimer with instruction manual (1999.3022).
- Urban R. Billmeier: "Gold Beater's Union" banner used in Chicago, Illinois, 1930s (1998.0331).
- Binney & Smith Inc. (through Tracey Muldoon Moran and Patrick Morris III): 101 Crayola crayon products, 31 chalk sets, 28 silly Putty products, 20 games, 17 children's play kits, 6 crayon sharpeners, 5 color sticks and pencils, 3 crayon containers, 2 erasers, a marker, crayon candle, crayon lifting paddle, and a child's art smock (1998.0068).
- Bio-Medical Products Corporation (through John G. Geppert): drug scan test, pregnancy test, and a tuberculosis test (1999.0171).
- William L. Bird: satirical book, *Bill Gates' Personal Super Secret Private Laptop, A Microspoof*, by Henry Beard, John Boswell, and Ron Barrett, 1998 (1999.0071); "Tinky Winky" Teletubby doll (1999.0122).
- Edward D. Black: appliqued, pieced, and embroidered quilt made for Mr. Black by his mother, Ruth Jones Black Patrick, worked from 1932 to 1952 (1998.0043).
- Sylvia Blake: pair of Valenciennes lace sleeves, set of matching sleeve borders, set of needle lace borders, and a hand embroidered net shawl (1997.0159).
- Patricia G. Bleicher: brass U.S. made muzzle-loading swivel cannon of the War of 1812 period (1998.0354).
- Boericke & Tafel, Inc. (through Felix H. Maez): display case of homeopathic preparations and 27 additional preparations of the 1990s (1998.0237).
- Boiron USA (through Mary P. Larkin): 9 homeopathic preparations (1998.0170).
- Brian Boitano: dark blue military style ice skating costume and a pair of black figure skates with

- American flag patches worn by Mr. Boitano during his gold medal winning "Napoleon" program at the 1988 Olympic Winter Games, and a teal blue ice skating practice suit (1998.0289).
- Dwight Blocker Bowers: 4 Pez candy dispensers with Muppet character heads (1999.0119).
- Banco Central do Brasil, Departamento do Meio Circulante (through Luis Henrique de Almeida Cabral): 6 uncirculated coins of Brazil minted for the year 1998 (1998.0343).
- Diana D. Braun and Rose D. Connolly: 75 pieces of decorated ceramics, kiln furniture, mold pieces, tools, glazes, paints, stains, and finishes, used by Mrs. Braun and Mrs. Connolly as hobby ceramicists, 1940s–80 (1998.0155).
- Katharine H. Brighoff, George Ross Phillips, John L. Phillips, and Sarah J. Yarborough, the children of John Lacey Phillips and Persis Anne Phillips: schoolgirl sampler made by M. A. Hofman at School No. 7 in Carlisle, Pennsylvania, dated 1848 (1998.0130).
- Mary W. and Thomas P. Brittain: sawed-off Smith and Wesson revolver used by train robber and "Wild Bunch" gang member Harry Tracy, 1870–72 (1998.0339).
- Bill and Joanne M. Bruegman: "Swahili" board game made by Milton Bradley, 1968 (1999.0267).
- Christopher J. Budesa: calculating rule used at South Junior High School of Bloomfield, New Jersey (1999.0068).
- Joseph E. Burke: translucent Lucalox Alumina ceramic demonstration disk, ca. 1959 (1998.0111).
- James C. Buss: custom billiard cue stick made by Mr. Buss of rock maple with ebony, leather, and inlays of various colored woods, 1998 (1999.0063).
- Janet H. Butler: 2 cotton bags used to package shot for Lawrence Brand and the Remington Arms Company, 1990–97 (1998.0276).
- Edward P. Caire: cotton bag used at the Columbia Sugar Mill in Edgard, Louisiana, 1929–49 (1999.3031).
- Calvert Group (through Jon Lickerman): pamphlet, "Reebok Human Rights Production Standards" (1998.3022).
- Robert B. Campbell in memory of Dorothy and William Campbell: 11,358 sound recordings, 2 radio station promotional jackets, and a poster, all collected by rock-and-roll radio disc jockey William Campbell (1996.3034).
- Ernestine Gilbreth Carey: 5 stereo autochrome glass plate negatives of the Gilbreth family by Frank B. Gilbreth, ca. 1909 (1995.0249).
- Pearl Carmichael: 10 sets of papers, bibliography cards, microfilms, and a portrait, all related to psychologist and Smithsonian Institution Secretary Leonard Carmichael (1983.3016).
- Mary Jeanne Carrera: LeClip quartz novelty watch, 1990s (1996.0325).
- Hannah L. Cayton in memory of Howard Cayton: set of personal letters, business documents, certificates, photographs, and advertisements of the Max and Rosa Cayton family of Washington, D.C., 1890–1993 (1993.3021).
- CBS News, "60 Minutes" (through Don Hewitt): Aristo stopwatch mounted on a board marked "60 Minutes," used to present the CBS news magazine from 1970–98 (1998.0265).
- John W. Chapman: rigged model of the ship *Susan Constant* made by Mr. Chapman (1998.0227).
- Clement Communications (through Geoffrey C. Walker): 11 work incentive posters (1995.0321).
- Martha Jane Coffin Trust (through Robert H. Strickland): cut glass champagne pitcher in the Brilliant style, probably made by Corning Glass Works of Elmira, New York, 1880–1905 (1987.0928).
- Colt's Manufacturing Company, Inc. (through Ronald L. Stewart): 4 Colt M16 firearms including a NATO submachine gun, rifle, light machine gun, and a commando machine gun (1998.0230).
- Computer Horizons Corp. (through Dennis DeVenuta and Mark W. Walztroni): set of 4 "millennium computer bugs" advertising ephemera (1997.3054).
- Coors Brewing Company (through Linda Hartman): 12-ounce steel beer can and a 7-ounce flip-top aluminum beer can of 1959 (1998.0153).
- Harry M. Corrigan: stock certificate of the First National Gold Bank of Santa Barbara, California, 1878 (1998.0316).
- Paul D. Costain: "Illusions" billiard cue stick made by Samsara, a partnership of Dave Doucette and Jim Stadium, 1998 (1998.0350).
- Edward J. Cronan: 2 bumper stickers, "DOPE 96 HEMP" (1998.0136).
- William Y. Crooks: IBM engineer's notebook related to the development of RAMAC (1998.3076).
- Celia Cruz: red dress with ruffles and white lace trim, gold vinyl shoes, and a honey-blond wig, all worn by Ms. Cruz in many of her Latin vocal performances (1997.0291).
- A. S. Csaky: ceramic mug designed by Mr. Csaky in a limited edition of 1,000 for the 52nd Presidential Inaugural in 1993 (1998.0187).
- Larry L. Culp: 39 pieces of riveting and welding equipment, 4 account books, and 2 pin-up calendars (1994.3119).
- Custom Prosthetic Designs Inc. (through Robert P. Barron): 2 silicone nasal prosthesis and 2 molds for replacement prosthesis (1997.0192).
- Joseph C. Czudak: 6 booklets, 2 shipyard documents, a poster, typescript, and a book, all relating to the NS *Savannah*, the first nuclear-powered merchant ship (1998.3075).
- Heather M. Dahley: hospital bracelet, T-shirt, hat, and a pair of mittens for Taylor Dahley, the first *in utero* bone marrow transplant recipient (1999.0031).
- Thomas J. Damigella in honor of Ann and Thomas Damigella: 38 film reels, 17 videotape cassettes, and 1.25 cubic feet of archival material documenting the history of Tupperware and the Damigella Tupperware Distributorship, 1951–96 (1997.3086).
- Anita Danko and Scott P. Rafe in memory of Stanislaus F. Danko: 16 sets of electronic component groups related to Stanislaus F. Danko's

- work in research and development of printed circuits (1998.0191).
- Kenneth S. Darby: sailboard made by Mr. Darby and his brother, S. Newman Darby, 1964 (1998.0323).
- Naomi and S. Newman Darby: sailboard sail with mast and boom set made by the Darbys, 1963–65 (1998.0086).
- S. Newman Darby: 2 dagger boards for use with the sailboard invented by Mr. Darby (1999.0118).
- Carlos G. Davila: 4 rifle receivers and a submachine gun made in Argentina (1997.0366).
- Kathleen N. Dejardin: invitation to an "Election '88 American Presidential Election Breakfast, Wednesday, November 9, 1988," held in Strasbourg, France (1999.0074).
- Delphi Interior and Lighting Systems (through Ronald E. Steele): work incentive poster, "Our Quality Policy" (1996.0323).
- The Dial Corporation (through Jane E. Owens): 18-karat gold "Breck" brooch with a large capital "B" set with diamonds, 1990–98, given to winners of the Breck Girl contest (1998.0107); 6 packages of Breck hair care products, 1954–70 (1998.0251).
- Katherine Dirks: 5 fabric samples and 2 printed Tyvek jackets (1998.0027).
- Margaret R. Dolan: woman's full length chinchilla fur cape with floral-patterned cut velvet lining, 1921–23 (1999.0161).
- Morrill B. Donnald: woman's bag made of crocheted silver metal thread, 1900–15 (1998.0321).
- Richard G. Doty: 68 Italian items including 66 *lira* coins, a silver medal of 1992, and a telephone token, and 3 Slovak bank notes of 1992 (1999.0142).
- Brantley A. Duddy: theatre organ made by the Wurlitzer Company of North Tonawanda, New York, 1929 (1998.3070).
- E. I. du Pont de Nemours & Company, Inc. (through Toni McClure): effector tip for a T-3 robot (1997.0107); 2 rolls of nylon fiber and a plaque (1997.3055).
- Duro-Test Corporation (through Dick Neubert): 8 fluorescent lamps, 4 incandescent lamps, a mercury vapor lamp, and a high pressure sodium lamp (1997.0062); 3 incandescent lamps (1997.3029).
- Philip J. Dziuk, Ph.D.: 5 silastic contraceptive implants developed by Dr. Dziuk in 1964 (1998.0236).
- Amy C. Earls and George L. Miller: sgraffito red-bodied earthenware plate designed by Kay Hackett for the Stangl Pottery Company in 1957 (1998.0272).
- Ebenezer Baptist Church Choir (through Michael L. Perry): 2 choir robes and a scapular (1997.0256).
- Elias Brothers Corporation (through Tony Michaels): Big Boy coin bank and a poster announcing "Big Boy Has Arrived in Saudi Arabia" (1998.0052).
- Elkinson and Sloves (through Jay R. Sloves) and Hartford Debate 1996 (through Daniel I. Papermaster): 3 posters, a press kit, button, key fob, T-shirt, sign, and a display set for voter registration, all produced during the presidential candidate debate held October 2, 1996, in Hartford, Connecticut (1997.0390).
- Carol R. Erdman and Andre D. Martin in memory of Carlton and Nina Erdman: 6 pieces of china in the English Brambleberry pattern made by Hopewell China Corporation of Hopewell, Virginia, ca. 1930 (1998.0309).
- ETA SA Fabriques d'Ebauches (through R. Waelchli): Plexiglas watch movement model with base-stand and carrying case (1996.0252).
- Ferris State College, School of Pharmacy (through Dean Ian W. Mathison, Ph.D.): 166 pharmaceutical artifacts, 1870–1930 (312142).
- Elizabeth Fielding: 4-drawer steel file cabinet from the office of Dr. Lewis J. Fielding, Daniel Ellsberg's psychiatrist, broken into by burglars looking for incriminating evidence in the Watergate affair in 1971, set of letterhead stationery, and an office door sign (1998.0268).
- Lavada W. Fintel: Victoria corn-straw parlor broom made in the Deshler Broom Factory of Deshler, Nebraska, ca. 1930, by members of Mrs. Fintel's family in the factory founded by her grandfather (1999.0197).
- Joe Fiscella: 2 billiard ball racks with ball bearings for smooth racking invented, patented, and manufactured by Mr. Fiscella (1999.0222).
- Douglas Fleming and Lynn L. Moore (through Don E. Peterson): Powers Cameragraph #6 motion picture projector, ca. 1906 (1998.0178).
- Mary Fletcher: pale blue organza ballgown with crinoline petticoat and a hoop petticoat, worn by Carol Morris when Miss Universe 1957 and by Ms. Fletcher at the 1963 U.S. Naval Academy Ring Ball (1998.0250).
- Gladys E. Ford: 7 examples of ceramics decorated with photographs in a process patented by Walter D. Ford and produced by the Ford Ceramic Arts of Columbus, Ohio, in the 1930s (1997.0403).
- Charles M. Free, Jr.: souvenir glass tumbler from the Jamestown Exposition held in Norfolk, Virginia, in 1907 (1997.0346).
- Jerry D. Free: 4 T-shirts, 4 pencils, a mug, and a key chain promoting the International Battle of the Bands (1999.0059).
- Prudence Fuchsmann: applique and stuffed work inscribed "ALife's Flower Basket, 1957" made by Mrs. Fuchsmann's mother, Bertha Stenge (1997.0011).
- Garment Industry Development Corporation (through Annie Liu): production notebook and a "help wanted" sign in Chinese (1997.0280).
- Gateway Coin Club of Merced County (through Theresa M. Lund): bronze medal commemorating the building of Lake Yosemite Reservoir finished in 1888, designed by Bill Jones in 1999 (1999.0157).
- Colleen R. Gau: unisex T-shirt with an abstract American flag design with white sailboats substituted for stars, 1997 (1998.0340).
- David D. Geary: 16 photographs of Cardinal Spellman's 1953 Christmas Mass in Korea, a photograph of boot camp in 1949,



- and a photograph of U.S. Navy hospital corpsmen (1997.3134); 2 photographs of Mr. Geary at boot camp in 1949 doing laundry and boxing for his company's team (1998.3059).
- Carole S. Geithner: cotton flour sack from the Russell-Miller Milling Company (1997.0042).
- General Electric Corporation, Corporate Research and Development Laboratory (through Bruce F. Griffing): 19 experimental electric lamps (1998.0050).
- General Electric Lighting Company (through Terry K. McGowan): 100 lamps, 1885–1980s, and a radiant heater, ca. 1900 (1997.0388).
- George Washington University, Procurement and Supply Department (through Nelson L. Bomba): 20 pieces of documentation related to a CDC 8090 central processing unit (1983.3017).
- Gerber Scientific, Inc. (through George Gentile): plastic cube containing shredded paper money inscribed "Cash is Cash, The Rest is Journal Entries" (1997.0033); (through H. Joseph Gerber): S-70 computerized fabric cutting machine with control panel, invented by Mr. Gerber and used by General Motors to cut vinyl for car seats, ca. 1969 (1995.0229).
- Norma Glad: T-shirt, "A Woman's Place is in the House . . . and Senate, Women's Campaign Fund," 1960s (1999.0018).
- Peggy Goforth: 17 pieces of Miriam Haskell costume jewelry, 3 jewelry pieces by other designers, and 3 jewelry boxes (1998.0257).
- Darcy S. Grant: Staedtler data processing logic template (1998.3095).
- Norman C. Greenberg: orchestral French horn custom made by Steven W. Lewis of Chicago, Illinois, 1982 (1999.0101).
- Nelse L. Greenway: political campaign button inscribed "FMBNH," meaning "For McCarthy Before New Hampshire," 1968 (1998.0188).
- Elaine Heumann Gurian: 3 books, a set of posters about Mexican life, boxed set of canasta playing cards, and a playing card rack (1998.0054).
- Marcy Gustafson: Howe Manufacturing Company book of pins (1998.0099).
- Gynetics Inc. (through Roderick L. Mackenzie): Preven emergency contraceptive kit and a demonstration kit, 1999 (1999.0226).
- Hagley Museum and Library (through Daniel T. Muir): Otto & Langen atmospheric gas engine made in Cologne, Germany, in 1867 (1998.0256).
- Edward E. Hammer: experimental spiral compact fluorescent lamp developed by Mr. Hammer, ca. 1976 (1997.0212).
- Chester R. Hansen: brass sextant marked Michael Rupp & Company, 1860–99, acquired in 1918 and used by Mr. Hansen's grandfather, Karl Axel Eriksson, as a sailor and a Commodore of ship convoys in WW II (1999.0156).
- Margaret Wetmore Harlan: ophthalmic surgical set made by G. Piling & Sons of Philadelphia and used by Dr. Nelson Franklin Wetmore in Wisconsin, ca. 1917 (1997.0347).
- Jean D. Harris: 2 T-shirts with U.S. flag motifs worn during the 1996 summer Olympic games (1998.0243).
- Karen Jean Harris: woman's clothing including a pair of shorts, 1921, Clio blouse, 1990, and black stretch stirrup leggings, 1991 (1998.0281).
- Diane B. Heiman: woman's wire mesh bustle with cotton cover, 1888–98 (1998.0296).
- Cecia Hess: Western Electric telephone booth containing a rotary dial coin-operated telephone with an amplifier for the hearing impaired, ca. 1949 (1997.0133).
- Jeffrey P. Hillelson: physician's day book kept by Mr. Hillelson's grandfather, Dr. Winfield Scott Morrison, in Missouri, 1878–82 (1996.0021).
- Jo Ann Taylor Holmes: Marchant Model 10D calculating machine with pamphlet, 1943, used by surveyor and civil engineer Curtis R. Taylor (1999.0139).
- Hormel Foods Corporation (through V. Allan Krejci): 2 Spam cans showing old and new labeling designs (1998.0218); 2 toy race cars, a key chain, watch, cap, fanny pack, necktie, and a T-shirt, all with Spam logos (1998.3068).
- Imperial Food Products, Inc. (through Charles M. Ivey III): 4 signs, 2 locker name tags, a smock, apron, pair of galoshes, pair of arm protectors, and a heavy steel door, all used at the Imperial Food Products chicken processing plant which burned in Hamlet, North Carolina, in 1991 (1996.0236); pair of Playtex yellow plastic gloves, ca. 1991 (1999.3018).
- J. C. Penney, Merchandising Operations and Communications (through Phyllis Romero-Tracy): pamphlet explaining "The J. C. Penney Supplier Legal Compliance Program" (1998.0076); 2 duplicate pamphlets of "The J. C. Penney Supplier Legal Compliance Program" (1998.3025).
- Barbara Janssen: girl's 2-piece "Annie Oakley" cowgirl outfit, 1954–56 (1998.0297).
- Mr. Jarres: GE Mazda projection bulb with glass reflector (1998.3054).
- John W. and Virginia L. Jarrett: Pullman conductor's uniform, hat, identification card, union dues receipt, 25-year union pin, leather folder, and a magazine, all reflecting the career of Wallace O. Jarrett, 1941–68 (1997.0331); 3 sets of documents and a notepad associated with the Pullman Company career of Wallace O. Jarrett, 1941–68 (1997.3146).
- Virgil L. Johnson: 24 cigarette packs, a cigarette case, and a pocket cuspidor (1998.0225).
- Alfred Jondahl: Pathe 9.5mm spring-driven motion picture camera converted to a still camera after WW II (1998.0177).
- Lila Kadaj: tambourine and a set of 4 tambourine jingles (1998.0053).
- John David Karr: 2 fuses, 1936–41 (1998.0279).
- Gary Keck: 5 pieces of commercial ceramics including 2 saucers, a leaf-shaped dish, ashtray, and an oval plate, 20th century (1998.0030).



- Barbara H. Kemp: political card stating "Always Buy Your Communist Products at Drug Fair," protesting the selling of products manufactured in eastern Europe during the Cold War (1998.0293); No Parking sign used during the inauguration of President Lyndon B. Johnson, January 19–20, 1965 (1998.0300).
- Harold J. Kepler: hand-held therapeutic lamp with a dark bulb producing radiant light and heat in a reflector, ca. 1918 (1999.0170).
- KFC Corporation (through Michael R. Tierney): 4 "Team KFC" name badges and a work cap, 1990s, and a clip-on black string necktie worn by Col. Harland Sanders in the 1960s (1999.0049).
- Priscilla C. Kidder: 9 wedding gowns and a petticoat designed for Priscilla of Boston by Mrs. Kidder, John Burbidge, and Jim Hjelm, 1968–90 (1997.0329).
- Claudia Brush Kidwell: pair of man's bowling shoes, 1970–85, and a woman's floral print cotton baseball cap, 1990–95 (1999.0046).
- Vincent King: Wood electric volt meter made by the Fort Wayne Electric Works of Fort Wayne, Indiana, ca. 1890 (1998.0112).
- Marvin E. Kirkland in memory of Marie and William C. Zuegel: 2-tune musical Christmas tree stand patented in the U.S. in 1886 and made by Eckardt of Germany in the 1890s (1999.0151).
- Edward C. Klauck: 2 linear calculating rules related to horse racing (1998.3050).
- Evelyn Weith Klees: 7 thermometers, a hydrometer, and a pipette, 1909–13 (1998.0215).
- Jeffrey Kliman: 51 photographs of the D.C. Curators summer jazz programs, 1994–98, and 15 photographic contact sheets documenting 2 of the programs in 1998 (1998.3105).
- Stacey Kluck: *The First Book of Rhythms* by Langston Hughes, 1954 (1999.3043).
- Kevin A. Klug: 5 MRI scans and a face mask used for a PET scan used to diagnose Mr. Klug's brain tumor prior to successful gene therapy treatment (1998.0291).
- Lt. Comdr. John W. Koster, USCG: 56 pieces of campaign memorabilia from the political career of Paul N. "Pete" McCloskey, 1970–75 (1997.0341).
- Sharon L. and Terry L. Krischer: pamphlet explaining 10 ways to survive a nuclear attack, 1960 (1999.0073).
- Gerald E. Kron, Ph.D.: 3 photomultiplier tubes and a photoelectric photometer with amplifier made in 1936 but modified by Dr. Kron and used by him at Lick Observatory into the 1950s (1997.0340).
- Julia Kushenbach: woman's gold-colored enameled metallic mesh purse with a swastika design, 1915–30 (1999.0190).
- Aveline and Michio Kushi: 64 macrobiotic food products and a "Rice is Nice" apron (1997.0240); rice huller made in Japan by Otake Agricultural Machinery Company, ca. 1985 (1997.0271).
- Vincent LaCapra: 2 U.S. patents issued to Pasquale D'Angelo for improvements to padlocks and locks, 1907 and 1915 (1999.0140).
- Amy Lamb: 18 proofs, photographs, prints, and note cards made by Ms. Lamb via a process of printing using an Iris computer-controlled digital system (1998.0358).
- Jennifer Langeberg: 2 design drawings by Ms. Langeberg for the "Napoleon" ice skating costume worn by Brian Boitano for his gold medal competition at the 1988 Olympic Winter Games (1998.0290).
- Anne M. Larsen: scarf and a shirt with printed illustrations by James Thurber (1999.0126).
- Wendy Leeds-Hurwitz: woman's silk dress of pink, ecru, green, and floral vertical stripes, 1840s (1998.0259).
- Judith Leiber (through Catherine Carmichael): 4 pairs of Judith Leiber designer earrings and a gift box, 1998 (1998.0282).
- Salvatore Leonardi: Dixie cup dispenser, 1940–59 (1998.0333); 18 cubic feet of archival records of the Brannock Device Company and the Park-Brannock shoe store (1999.3007); 2.5 cubic feet of trade literature documenting the U.S. shoe industry (1999.3008); 1.5 cubic feet of miscellaneous trade literature (1999.3009).
- Levi Strauss and Company (through Lynne Downey): 10 copies of "Levi Strauss & Co. Business Partner Terms of Engagement and Guidelines for Country Selection" written in English, Spanish, Portuguese, French, German, Italian, Flemish, Greek, Chinese, and Korean (1998.3024).
- Philip H. Lichty: bottle of synthetic PML79 watch oil from the first batch made at the Hamilton Watch Company, 1950s (1998.0307).
- Amelia M. and Peter Liebhold: 2 electronic games, 1997 (1998.0228).
- Steve Lubar: T-shirt, baseball cap, insignia, and a bearing rate computer, all related to the SSN *Trepang* deployment and decommissioning (1998.0253).
- William M. Lubar: 8 lapel pins, a garnet ring, and a gold-plated watch, all awarded to Mr. Lubar during his career as an insurance salesman, 1949–85 (1998.0335).
- Vince Lupo: paperback book, *Slick Willie, Why America Cannot Trust Bill Clinton*, by Floyd G. Brown, 1993 (1999.0069).
- Joshua L. Mack: serigraph and photomechanical lithograph poster print titled *Art*, by Jim Dine, 1968 (1998.0207).
- Princess Masha Magaloff: set of seed pearl jewelry of 1820–40 in its original box consisting of 2 brooches, a necklace, and a pair of earrings, originally used in Jones County, Georgia (1999.0021).
- Maidenform, Inc. (through Steven N. Masket): 33 brassieres, 9 girdles, 8 corsets, 3 display forms, 2 boxes, 2 garter belts, a pigeon vest, waist cincher, set of fabric samples, and a 7-piece advertising costume with boxing gloves, 1932–97 (1997.0177); 3.5 cubic feet of archival materials documenting the history of Maidenform, Inc., 1922–97 (1997.3056).
- LaVeda Mair: 3 wooden bottle shapes and a glass jar, all designed by

- Francis Mair for commercial packaging (1998.0058); 4 cubic feet of food, beer, wine, and fruit crate labels collected by Francis Mair (1998.3010).
- Sylvia Maizuss: 2 infant girl's dresses of off-white batiste, 1909 (1999.0163).
- Betty M. Margan: Hanovia portable ultraviolet sun lamp, ca. 1946 (1998.0120).
- Yolanda R. McCulloch in memory of Maria F. Paterno Russo: 32 pieces of Guardian Service hammered aluminum cookware with glass lids made by Century Metalcraft Corporation of Chicago, late 1940s (1999.0194).
- Kathleen M. Willson McDevitt: 6 objects related to the Willson Way System of creating identification badges including an original wooden camera, Identograph camera, printer, Ilex lens board, set of parts, and a set of 3 glass plates, all reflecting the inventions and work of father and son Thomas Carroll Willson, Senior and Junior (1996.0150).
- Florence A. McGuire: woman's wedding dress designed by Priscilla of Boston in 1955, worn by Mrs. McGuire and her 2 sisters (1998.0090).
- Harry (Mousey) McKee: red nylon team jacket worn by Mr. McKee when playing softball for Washington Steel Corporation in Washington, Pennsylvania, 1974 (1999.0033).
- Eileen Rauli McMahon: woman's negligee and robe set made of parachute nylon and belted with parachute cord, made in 1947 for Mrs. McMahon's wedding trousseau by her mother (1999.0004).
- Gert McMullin in memory of Roger Lyon: AIDS quilt panel memorializing Roger Lyon, made by Cindy McMullin about 1987 (1998.0254).
- Jerry McWorter: custom billiard cue stick made by Mr. McWorter of rock maple, pink ivory wood, silver, ebony, and elephant ivory, 1998 (1999.0178).
- Rita Chavez Medina (through Rudolph C. Medina): short-handled hoe bought in 1939 by Cesar Chavez's father and used by several family members, forced use of this type of hoe was outlawed by the State of California in 1970 (1998.0197).
- Montgomery College at Takoma Park, Mathematics Department (through Prof. Mary Kay Abbey): Dietzgen 3-foot wooden blackboard rule (1999.0160).
- Jerry Montgomery: photograph of the Washington Steel baseball team of Washington, Pennsylvania, 1974 (1998.0334).
- Evan and Johnnie Lu Morgan: 43 pieces of formal and informal chinaware and glassware from sets given to Mrs. Morgan for her wedding in 1959 and 15 pieces of formal chinaware from the set given to her mother, Nancy Dickson, for her wedding in 1924 (1998.0356).
- Charles E. and Dorothy I. Morrison in memory of Bessie K. and Charles Morrison: 19 pieces of ceramic Fiesta ware made by the Homer Laughlin China Company, 1936–59 (1999.0136).
- Harold D. Motin: charcoal drawing of "Buffalo Soldier" Harry Motin and a pamphlet of revival meeting songs used by Frances E. Motin (1998.3045).
- Motorola, Incorporated (through Pamela J. Cox): clean room suit consisting of 2 pairs of gloves, a jumpsuit, hood, pair of boot-leggings, and a "Protocol Starts With Me" pin (1995.0096).
- Takako S. Mundel: 3 sets of colored pencils, a passport, identification card, stop watch, motion picture camera, and a projector, all used by Marvin E. Mundel in his efforts to determine work standards in industrial engineering (1999.0032); 15 cubic feet of archival records documenting the career of Dr. Marvin E. Mundel in the fields of motion studies and industrial engineering (1999.3010).
- The National Labor Committee (through Charles Kernaghan): 3 brochures, a postcard, T-shirt, and a button, all related to sweatshops and child labor (1997.0309); brochure about sweatshop labor (1998.3008).
- National Security Systems, Inc. (through John Whitney Walter): silver *decadrachm* of Syracuse, 465 B.C. (1999.0045).
- New Horizons Diagnostics Corporation (through David P. Trudil): 9 sensitive membrane antigen rapid test (SMART) detection kits and 2 biological sample collection kits (1998.0308).
- Eleanor B. Niebell for the Paul Milton Niebell, Sr. Collection: round violin bow made in Mirecourt, France and imported by Albert Moglie of Washington, D.C., 1950–70 (1998.0241).
- NuvoMedia, Inc. (through Mary E. Ruberry): Rocket-eBook electronic book device, 1999 (1999.0192).
- Mary K. O'Hara: 3 signs made by Ms. O'Hara and friend Ann M. Welch for use at the anti-impeachment rally held on the U.S. Capitol grounds on December 17, 1998 (1999.0081).
- Osram-Sylvania, Inc. (through Richard H. Dowhan): 24 experimental light bulbs and 3 lamp holders, 1946–80 (1998.0005).
- William T. Oviatt: 2 prototypes and 2 production models of the Teeter Pong! mouse trap invented by Mr. Oviatt (1997.0034).
- Johanna R. Pasha in memory of Mr. and Mrs. Robert Law Higgins, Sr.: commemorative salt and pepper shakers given to the Higginses at their 50th wedding anniversary in 1981 (1997.0393).
- Peerless Rockville Historic Preservation, Ltd. (through Eileen S. McGuckian): platform pamphlet of the Republican Association of Washington, D.C., dated January 17, 1856 (1998.0301).
- Marvette Pérez: 20 ceramic pieces including planters, salt and pepper shakers, and figurines of "sleeping Mexicans" and other Mexican stereotypes, 1925–50 (1999.0196).
- Peterson Electro-Musical Products, Inc. (through Scott R. Peterson): Peterson Model 400 strobe tuner, 1970s, and a copy of the book *Complete Course in Electronic Piano Tuning*, 1974 (1999.3036).

- Pitometer Associates, Inc. (through G. Brewster Cole): 14 pieces of equipment comprising a Prism Photo Recorder used to measure rates of flow in municipal water distribution systems, invented by Edward Smith Cole in 1908 (1999.0116).
- Joyce M. Pocras: Campfire Girl material of the 1940s including 9 handkerchiefs, a neckerchief, vest, pair of socks, and a handbook (1998.0154).
- Richard H. Ponterio: 2 Mexican silver 4-real coins of Charles and Johanna, 1536–56 (1999.0006).
- Christina A. Popenfus: woman's jewelry and clothing including 11 pairs of earrings, a bracelet, brooch, body paint kit, pair of shoes, pair of boots, skirt, and a blouse, 1985–98 (1998.0242).
- Potomac Electric Power Company (through Gwendolyn Hawkins and Zenayda Mostofi): 5 fluorescent light bulbs, 1990–93 (1996.0357).
- Dr. Linda S. Potter: 12 packages of oral contraceptives (1997.0360).
- Barbara J. Powell: 11 hair styling implements, 3 beauty products, 2 chairs, a gas heating coil, mirror, and a shop sign, all used by African American beautician and inventor Dr. Marjorie Joyner, 1920–39 (1997.0068).
- Procter & Gamble (through Edward M. Rider): 120 health and hygiene products, 13 product pamphlets, and a book about the company (1984.0718).
- Progressive Asset Management, Inc. (through James Howard Nixon): 3 leaflets regarding Disney Company business practices and its shareholders (1997.3148).
- Abraham Quintanilla for the Quintanilla Family: black leather jacket, pants, boots, and a black satin brassiere, all worn on stage by *Tejano* singer Selena Quintanilla Perez, 1990–95 (1999.0104).
- Gunther Ramm: Porta Ladychron wristwatch (1998.0247).
- Mark Anthony John Rea, Jr.: left and right pointed eartips and an authentication card verifying Leonard Nimoy wore them in the film *Star Trek II: The Wrath of Khan*, 1982 (1999.0102).
- Gilbert H. Reiling: experimental halarc light bulb and a reproduction of GE's 1912 Charles Steinmetz patent lamp (1996.0084).
- Leslie and Nick Reynolds: Martin tenor guitar and a Gon Bops conga drum played by Mr. Reynolds while a member of The Kingston Trio and a gold record awarded to the group (1998.0355).
- H. Smith Richardson, Jr.: 41 mostly cold and flu product samples of the Vick Chemical Company, 1906–80 (1998.0267).
- George Riesz: Bell Laboratories germanium point contact transistor set, 1950s (1998.0313).
- James C. Ritchey: 8 stereographic photographs relating to Presidents William McKinley, Theodore Roosevelt, and William Howard Taft, a ticket to the Republican National Convention of 1892, and a ticket to an address by President McKinley in 1901 (1999.0011).
- Franklin A. Robinson, Jr.: man's buckle and 8 woman's items including 5 cosmetics, 2 brooches, and a card of floral buttons (1998.0129).
- Robert G. Rolfe: 2 photographs of a meat shop and large machinery by William Dinwiddie, news correspondent in Manchuria during the Russian-Japanese War in 1904 (1998.0100); Knickerbocker pocket watch (1998.0222); metal door or window alarm patented by John G. Eberstein in 1902 and manufactured by the Automatic Alarm Company of Chicago, Illinois (1999.3025).
- Roosevelt Medal Decendants (through Marc Quinn): bronze Theodore Roosevelt medal awarded to all U.S. citizens who gave at least 2 years of continuous service in building the Panama Canal, this medal was awarded to G. A. Heath who worked 1904–6 (1999.0111).
- Arthur D. Sager: 4 man's polyester doubleknit suits including a tuxedo, 1971, blazer with 2 pairs of trousers, 1971–72, flannel suit, 1973, and a leisure suit, 1974 (1998.0221).
- Saint Petersburg Times (through Mike Foley): 12 pieces of documentation and memorabilia created for the October 9, 1996, vice presidential debate held in St. Petersburg, Florida (1997.0391).
- Sandia Corporation, Sandia National Laboratories (through Paul McWhorter): 6 microengines on microchips (1998.0127); 6 sets of micromachines on microchips (1998.3035).
- Mary Louise San Miguel: 3 over-the-counter medicinal preparations, a soap sample, dietary supplement, tonic box, and a roll of pharmacy labels, all from the *Botica Guadalupeana* Drug Store in San Antonio, Texas (1999.0097).
- Debbie Schaefer-Jacobs: 2 gym suits, a gym sweatshirt, and a pair of shorts (1998.0348).
- Stina Schloss: brass gaming token from the Mandalay Bay Resort and Casino in Las Vegas, Nevada (1999.0141).
- Sam Schmerler and Savilla Teiger: peace banner with a religious message carried in various anti-war marches in Washington, D.C., during the 1960s (1999.0019).
- Laura T. Schneider: 2 ice skate blades patented in 1888 (1998.0174).
- Seiko Corporation of America (through Tsutomu Mitome): Seiko Astron watch module encased in Plexiglas, ca. 1969, and a reproduction Astron wristwatch (1998.0248).
- Anne M. Serio: electric clothes presser made by the Electric Presser Company of New York, ca. 1934 (1999.0129).
- Charmaine Severson: woman's blouse with a "Cracker Jack" logo print, 1973–77 (1999.0020).
- Earl V. Shaffer: backpack, boots, pith helmet, head net, poncho, and a cookset, all used by Mr. Shaffer on two of his hikes of the Appalachian Trail, 1948 and 1965 (1999.0189).
- Dr. Mildred Shaw: English ICL logic template used for flow charting in the 1960s by Dr. Shaw (1998.3092).
- Alvin M. Shayt: Boy Scouts of America membership card issued to Mr. Shayt in 1937 (1998.0285).

- David H. Shayt: 2 watch repair shop log books, 1914–39 (1996.0004); quartz analog shelf clock in a plastic housing that spells “CLOCK” (1998.0249).
- Shear Madness* Company (through Jetaun Dobbt): autographed poster for the Kennedy Center play, *Shear Madness* (1998.0196).
- Brian Shulman, M.D.: Autogen 5100 digital integrator, Autogen 1700 EMG dual channel unit feedback myograph, and a Realistic speaker (1998.3005).
- Jack Siefert: Selmer alto saxophone, 1934, LeBlanc Boehm system clarinet, 1940–50, and a LeBlanc soprano saxophone, 1946–50, all associated with the Woody Herman Orchestra (1998.0240); 13 cubic feet of sound recordings, photographs, magazines, awards, and posters pertaining to the career of musician and band leader Woodrow Charles “Woody” Herman (1998.3073).
- Philip Simmons: cotton hook used on the Charleston, South Carolina, docks in the 1940s, a pair of tongs, 1950s, and a forging hammer, 1960s, all made by Mr. Simmons during his career as a blacksmith of tools and, later, of decorative ironwork (1999.0177).
- Kathryn T. Simpson: woman’s thigh-length vest quilted with cavorting nude nymphs, designed and made by Whitney Kent, 1986 (1999.0095).
- Skirball Cultural Center, Skirball Museum (through Grace Cohen Grossman): photograph of a tribute dinner for Franklin Delano Roosevelt, 1932–33 (1998.0202); pamphlet of Woodrow Wilson’s “War Message to Congress, Monday, April 2nd, 1917” (1999.0010).
- Walter A. Smith, Jr. Trust (through Flossie H. Smith): Colt Model 1903 automatic hammerless pocket pistol (1998.0310).
- Mark Solomon, Ph.D.: blue-gray artificial eye worn by Dr. Solomon, 1963–98 (1998.0223).
- Stall & Dean (through Henry N. Jackson): 75 examples of athletic equipment and uniform items made by Stall & Dean and 2 advertising posters (1998.0324).
- Steris Corporation, Business and Associate Relations (through Gerry Reis): surgical table, lamp, warming cabinet, and a metal stand (1998.0066).
- Edith D. Stevens: Tiffany & Company gold pocket watch presented in 1916 to F. R. Stevens by the Russian government for delivering locomotives ahead of contract schedule (1996.0037).
- Ruth B. Stevenson: miniature mission bell commemorating *El Camino Real*, the King’s Highway, from San Diego to San Francisco, 1769–1915 (1999.0075).
- Jack A. Strahs: Commodore 201 electronic calculator (1998.0246).
- Susan B. Strange: 2 buttons, a coin, and a medallion from various political campaigns, 1969–93 (1998.0189).
- Gray Sturm: T-shirt commemorating the “Sultan of Swing, Mark McGwire, Sept. 8, 1998” (1998.0337).
- Julie A. Su: 2 key chains and a red banner with black Asian character lettering (1998.3021).
- John August Swanson: 19 prints and stencils including beginning drawings, progressive color proofs, and a state proof, all used to produce *Balancing Act* by Mr. Swanson (1998.0146).
- Tarnuck Bookseller & Sons (through Lawrence Abramoff): 24 work incentive posters, 1958–73 (1997.0140).
- Lonn W. Taylor: Cub Scout cap and kerchief (1998.0347).
- Lisa Thoerle: white plastic fly swatter marked “We’ll Get the Bugs Out” (1998.3093).
- Bettee-Aynn Amsterdam Thomas: Calvin Klein’s Contradiction promotional perfume gift set, 1998 (1998.0283).
- Marion L. Tiger: Polaroid Square Shooter 2 land camera (1998.0352).
- Union of Needletrades, Industrial and Textile Employees (through Jay Mazur): 14 objects relating to employee abuse in sweatshops including 10 documents, a set of stickers, shopping bag, T-shirt, and a videotape cassette (1997.0310).
- U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Ocean Service, National Geodetic Survey (through Shepherd A. Cofer): automatic geodetic surveyor’s level made by Zeiss/Jena (1998.0006); geodimeter Model 2A electronic distance measurer with 2 mirrors, an optic unit, and a tripod, manufactured by AGA in Stockholm, Sweden, 1957–67 (1998.3094); National Weather Service (through Violet Foster): mercury barometer used at Washington, D.C.’s Ronald Reagan National Airport, 1941–98 (1998.0305).
- U.S. Department of Defense, Department of the Air Force, Air Force Systems Command, Headquarters Space Systems Division (through Capt. J. O. Bunting): set of documentation for the Burroughs Atlas Model J1 computer (1983.3019).
- U.S. Department of Defense, Department of the Army, Institute of Heraldry (through Thomas B. Proffitt): 28 pieces of distinctive unit insignia and 10 pieces of shoulder sleeve insignia (1998.0205).
- U.S. Department of Energy, Los Alamos National Laboratory, Business Operations Division, Property Loan Operations (through Brett Ray): air pod used to sample nuclear particulate debris in the atmosphere, ca. 1971 (1998.3097).
- U.S. Department of Justice, Immigration and Naturalization Service (through Phil Bonner): 24 forged documents, censored letters to worker’s families, items sold at a company store, and evidence photographs, all related to the raid on the El Monte, California, sweatshop on August 2, 1995 (1997.0268).
- U.S. Department of Labor, Employment Standards Administration, Wage and Hour Division (through Suzanne Seiden): U.S. Department of Labor identification badge wallet (1998.3026).
- U.S. Department of the Treasury, U.S. Customs Service (through Norma

- Humphries): half-shade polariscope made by Josef and Jan Fric of Prague in Bohemia, pre-1920 (1999.0029).
- U.S. National Archives and Records Administration, Harry S. Truman Library (through Patricia A. Dorsey): 6 pamphlets and brochures stating Democratic Party concerns and issues, 1929–48 (1997.0315).
- U.S. Postal Service, Greensboro Bulk Mail Center (through Richard F. Capps): conveyor carriage, tray, and a cantilever style tripper, all part of a Speaker system for sorting mail, used 1975–98 (1998.0219).
- Unknown: woman's black satin silk parasol with a carved wooden handle in a grapevine motif, 1895–1905 (1998.0168); T-shirt, "It's Our Turn Now, Mondale Ferraro, 1984" (1999.0072).
- Margaret C. Vail: 122 Kodak Brownie snapshots made by Franklin Nichols Corbin during travels through North and South Carolina and Georgia as a salesman in the 1890s (1998.3060).
- Nguyen Van-Thang: *Kiano* Close and Open block game invented and patented by Mr. Van-Thang with an explanatory banner and a Vietnamese *Gay-Than* bamboo magic stick with explanatory banner (1996.0279).
- Elizabeth A. Vaughan in memory of Adele V. and O. W. "Deke" Brownlee: black paper "Goldwater for President" hat (1999.0009).
- Harry Wachsberg: 19 diamond cleaving tools used by Israel Grinblat at Mr. Wachsberg's diamond-cutting shop in New York City (1998.0239).
- John Whitney Walter: 4 silver *tetradrachms* of Leontinoi, Sicily, 470–465 B.C. (1998.0329).
- Betty Lawson Walters: jar of Dr. Jacob Becker's Eye Balsam used by Mrs. Walter's father, Albert V. Lawson, Jr., in 1923 (1999.0037).
- Richard S. Walton: 28 watches, watch components, concept pieces, display pieces, and memorabilia from Mr. Walton's career as a pioneer in the invention of electronic watches, 1960s–70s (1999.0030).
- Peter M. Warner: 10 fast food restaurant polystyrene containers, a razor strop with an advertisement written on, and a religious U.S. Bicentennial poster (1998.0349).
- C. Malcolm and Joan Pearson Watkins: 2 books with photographic illustrations about houses and architecture, 1854 and 1864 (1993.3210).
- Winifred S. Weislogel: 12 report cards, 7 certificates, 2 quizzes, a set of charts and experiments, student handbook, and an oral hygiene diploma, all from Ms. Weislogel's public school education, 1932–45 (1998.0047).
- Robert M. Weiss, M.D.: pair of infant boy's brown leather shoes worn by Dr. Weiss' father in 1912 (1998.0245).
- Perry R. Weston: custom billiard cue stick made by Mr. Weston of maple, ebony, silver, water buffalo horn, and black monitor lizard skin, 1998 (1999.0051).
- Ruth Coleman Wetherall: 6 objects used by C. Norman Coleman who went on 3 expeditions to Antarctica between 1945 and 1968 including 2 insignia, a pin, commemorative plate, license plate, and an experimental face protector (1997.0371).
- W. Alson Wheeler: 2 machinist's tool chests with tools (1999.0180).
- Fred E. Whelan: Gruen Teletime wristwatch (1998.0229).
- Elaine Whitman, R.T.: 7 bilateral xeromammograms, 1985 (1998.0341).
- Widex Hearing Aid Company Incorporated (through James Scott Cola): Senso CIC digital hearing aid, 1997 (1997.0190).
- Joan W. Wiefelspuetz in memory of M. Lee White: 332 personal and documentary objects relating to the career of American sculptor Adeleide Johnson best known for works depicting suffrage pioneers (1987.0009).
- James J. Williams: protractor, logic template, office organizing template, and a set of 2 punched cards used as templates for drawing lines (1998.3104).
- Prof. Michael R. Williams: 4 logic templates and 2 punched cards (1997.3099).
- Virginia H. Wilson: 4 documents and 2 photographs relating to the WW I U.S. Navy Yeoman (F) service of Jessie Hunter Collins (1998.3029).
- Barbara and Warren Winiarski: 28 pieces of equipment and tools used in the vineyards and winery operations at Stag's Leap Wine Cellars (1998.0181); 47 wine bottles, bottle labels, winery tools, and vineyard tools used at Stag's Leap Wine Cellars (1998.3058).
- Katherine Dye Winkler: yellow ceramic Fiesta ware carafe with stopper made by the Homer Laughlin China Company, 1936–46 (1999.0017).
- Jerry Wise: plastic model airplane and an employee identification badge of Bendix Aviation used by Brownie Wise during WW II (1994.0121).
- Witherspoon Street Presbyterian Church (through Cecelia B. Hodges and Shirley A. Satterfield): pew, sign, and a Sunday school chair from the church in Princeton, New Jersey, where Paul Robeson's father, former slave Rev. William Drew Robeson, was minister from the 1870s to 1901 (1999.0127).
- Janice C. Wolf: 3 78rpm phonograph records, a tri-fold album cover, and a brochure, all comprising "Victor Records for Healthy Exercises," ca. 1923 (1999.0113).
- Preston Wolfe (through John F. Wolfe): double-headed timber-framing maul branded "WPA," 1930s (1998.3086).
- Cornelius C. Wood: pair of unisex socks with an American flag motif, 1998 (1998.0201).
- Helena E. Wright: gym tunic and bloomers worn by Ms. Wright at Bryn Mawr College, 1964–68 (1998.0132); woman's accessories including 2 garter belts, a lipstick "matchbook" set, false eyelashes, hair net, and a perfume sample, 1940–70 (1998.0320).
- Raymond Wright: 9 Mexican specimen notes from the pre-1910 revolutionary period (1998.0342).
- Jay A. Wruck: roll of Kodak Ektachrome infrared film (1998.3013).

Wyeth-Ayerst Laboratories (through Audrey Ashby): Norplant contraceptive system kit with 2 sets of educational material (1998.0157).

F. Houston (Hugh) Wynn: man's Hawaiian feather lei hatband, 1945–48, and a photograph of members of the Honolulu Traffic Commission of 1948 showing some men wearing similar hatbands (1998.0142).

William Yarborough: portable Hermes Baby Rocket typewriter made by Hermes-Presica of Switzerland at Sackingen, Germany, 1966 (1999.0185).

William H. Yeingst: framed photograph of a model of the Valium molecule taken by David Ladd, discoverer of Valium (1998.0306); electric coffee grinder made by the Cory Glass Coffee Brewer Company, 1940s–50s (1999.3024).

## National Museum of the American Indian

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 Gift from Ms. Eleanor Burleson: Three pair of Sioux moccasins and a beaded pipe bag (4 pieces) (25/5010–25/5013).  
 Bequest from the John W. Douglas Estate—deposited by Alice Wong: Eight Inuit prints (25/4834–25/4841).  
 Bequest from the Irene Gibson Estate: Collection of Pueblo pottery and animal figures (32 pieces) (25/4812–25/4833).  
 Gift from Mr. Steven Grafe: Dissertation: "The Origins of Floral

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 Gift from Ms. Hilda Grunblatt: Bolivian hat (25/5028).  
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 Gift of Marilyn B. and John D. Henderson: Pottery vessels from Arizona and New Mexico (25/5032–25/5045).  
 Gift from Ms. Suzanne Hill: Publication: "The Flint and the Feather."  
 Gift from Mr. Carl Kanter: Four catawba animal effigy pots (25/5006–25/5009).  
 Gift from Mr. John M. Kaufman: Two photographs of Chief Iron Hail.  
 Gift from Ms. Priscilla (Pam) King: Collection of 146 objects consisting primarily of Pueblo pottery, Northwest Coast, Pima and Apache baskets, and textiles from the regions of Two Grey Hills, Burnt Water, Teec Nos Pos and Wide Ruins (25/4658–25/4801 and 25/4890–25/4891).  
 Purchased from Lee Marmon \$7,500: 70 photographs from the exhibition at GGHC "Lee Marmon: 50 Years at Laguna Pueblo."  
 Gift from Quechua Delegation; Nazario Turpo—spiritual leader: Offering arrangement (Despacho) dedicated to Mother Earth (Pachamama) (25/5027).  
 Gift from Quechua Delegation; Mr. Carmelo Achangaray and Ms. Guadalupe Holgado: Quechua hat, Uncuna (small bundle for coca leaves), man's poncho, authority stick with engraved silver sheets (4 pieces) (25/5020–25/5023).  
 Gift from Quechua Delegation; Mr. Nazario Turpo: One man's hat (Chulla), one man's poncho (2 pieces) (25/5025–25/5026).  
 Gift from Quechua Delegation; Mr. Carmelo Achangaray: Ceramic vessel dedicated to the NMAI-SI (25/5024).  
 Gift from Quechua Delegation; Aurelio Carmona: Two journals published by the Universidad Nacional de Cusco—Revista Universitaria no. 135, 1993; Andes no. 3, 1999.

Purchased from visiting Quechua Delegation \$150: One Quechua poncho One Quechua hat (25/5018–25/5019).  
 Purchased from Gene Quintana \$21,600: Nine baskets by weaver Bertha Wright (25/4878–25/4886).  
 Gift from Ms. Marcella Ruch: Book: *The Gang of One: The Life and Times of Vera Gang Scott* by Dr. Roosh (Marcella J. Ruch).  
 Gift from Ms. Nancy Rosoff: Kuna Pounder (25/5029).  
 Gift from Mr. David Saity: Collection of 35 pieces of Navajo and Zuni jewelry and one cradleboard (25/4842–25/4877).  
 Gift from Mr. Ron Harris Shafer: Cherokee pot (25/4889).  
 Gift from Anna May and Morton Silverman: Two sculptures by Bruce LaFountain, Chippewa: *Hurry Me Home and Spirit Friends* (25/5043–25/5044).  
 Gift from Alice Coleman Smith— from the Estate of Jean Ellen Coleman: Two Apache toy cradleboards, sand painting (25/5015–25/5017).  
 Gift from U.S. Department of Justice: Navajo wearing blanket circa 1865 (25/5005).  
 Gift from Ms. Thea Westreich and Mr. Ethan Wagner: Two woven Tlingit baskets (25/5041–25/5042).

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 (2010420).  
 Adrian College, Adrian, Michigan. 3  
 mites (2010093).  
 Agricultural Research Center,  
 Esfahan, Iran. 80 moths (2008776).



- Agricultural Research Council, Pretoria, South Africa. 8 parasitic wasps (2009678).
- Agricultural University, Wageningen, The Netherlands. 1 fish specimen (2011221).
- American Museum of Natural History, New York, New York. 2 mollusks: gastropods (1046355).
- Amway Corporation, Lake View, California. 6 lace bugs (2008104).
- ARC-Plant Protection Research Institute, Pretoria, South Africa. 4 mites (2013045).
- Arizona State University, Tucson, Arizona. 32 tiger beetles (2009407, 2012151).
- Asociacion Mexicana de Orquideologia, Mexico City, Mexico. 3 plants (2010799).
- Asociacion para la Conservacion del Patrimonio de Cultiviren, Lima, Peru. 14 Anthropological specimens; seeds, necklaces, axe, bag, comb, and baby carrier (1046011).
- Auburn University, Auburn, Alabama. 2 fish specimens (2013093).
- Auckland Institute and Museum, Auckland, New Zealand. 2 gastropods (1046336), 2 mollusks (1046339).
- Australian Quarantine and Inspection Service, Canberra, Australia. 2 insect specimens; scale and mites (2008521).
- Behrend College, Erie, Pennsylvania. 23 caddisflies (2008636, 2009069, 2009459).
- Bermuda Biological Station for Research, Inc., St. George's, Bermuda. 10 crustacea (2012119).
- Bernice P. Bishop Museum, Honolulu, Hawaii. 15 fish specimens (2011159, 2012664).
- Boston University Marine Program, Woods Hole, Massachusetts. 23 crustacea: copepods (2011535).
- Botanic Gardens of Toyama, Taiwan. 2 lichens (2008630).
- Brigham Young University, Provo, Utah. 63 vascular plant specimens (1013178).
- California Academy of Sciences, San Francisco, California. 2 mollusks (1046342), 1 mollusk: gastropod (1046344), 4 wasps (2008456), 1 barnacle (2009478), 1 fish (2011736).
- California Department of Food and Agriculture, Fresno, California. 6 beetles (2010533, 2010548).
- California Institute of Technology, Pasadena, California. 24 analyzed glass rods (2010751).
- California Polytechnic State University, San Luis Obispo, California. 2 plants (2011362).
- Center for Marine Conservation, Washington, D.C. 15 crustaceans from Navassa Island (2009402).
- Center for Land and Biological Resources, Ottawa, Ontario, Canada. 9 moths (2011976).
- Chiba University, Chiba, Japan. 11 petunias from Brazil (2011848).
- Chonbuk National University, Chonju, Republic of Korea. 5 fish specimens (2012239).
- Cidade Universitaria, Sao Palo, Brazil. 4 mollusks: gastropods (1042964).
- Los Angeles County Museum of Natural History, Los Angeles, California. 10 mollusks: gastropods (1046436, 1046441).
- College of Micronesia, Pohnpei, Federated States of Micronesia. 16 fish specimens (2012871).
- Colorado State University, Fort Collins, Colorado. 20 caddisflies from Korea (2008378), 96 caddisflies and mayflies from Mexico and Costa Rica (2010299).
- Columbia University, Biosphere 2 Center, Oracle, Arizona. 62 isopods from Brazil, Mexico, and the United States (2009135).
- Companhia Vale do Rio Doce, Espirito Santo, Brazil. 4 plants (2006449), 5 Asteraceae plants (2009824), 8 Begoniaceae and Graminae plants (2012466), 14 Commelinaceae plants (2012721).
- Continental Shelf Associates, Metairie, Louisiana. 3 fish specimens (2010166).
- Coral Reef Research Foundation, Koror PW, Federated States of Micronesia. 39 fish specimens (2010559), 6 corals (2010936).
- Cornell University, Ithaca, New York. 8 freshwater crabs (2009869), 4 Acanthaceae plants (2010940).
- DePaul University, Chicago, Illinois. 75 crustacea (2009215).
- Dow Agro Sciences, Tampa, Florida. 459 true bugs, assassin bugs, broad-headed bugs, and toad bugs (2010157).
- El Colegio de la Frontera Sur (ECOSUR), Chetumal Quintana, Mexico. 19 crustacea: copepods (1046202, 2007982, 2008619, 2009814, 2011028).
- EMBRAPA-Recursos Geneticos e Biotecnologia, Caixa Postal, Brazil. 13 mites (2009425, 2011901).
- ENSR, Consulting, Engineering and Remediation, Woods Hole, Massachusetts. 2 crustaceans (2012074).
- Entomology Research Group, Innsbruck, Austria. 4 bugs from Italy and West Africa (2011876).
- ESCO Associates, Boulder, Colorado. 56 Asteraceae plants from Peru (2012313).
- Field Museum of Natural History, Chicago, Illinois. National Cancer Institute vouchers: 4 from Borneo (1046469), 9 from Borneo and from Papua New Guinea (1046473), 181 from the Philippines (1046478), 123 from Papua New Guinea (1046479), 41 from Thailand, Singapore and E. Malaysia (1046488), 66 from Papua New Guinea (1046494), 44 from Vietnam (2011202), 1 Non-National Cancer Institute voucher from Thailand (1046489), 1 mollusk (2008625), 34 various plant families from Peru (2011206), and 2 Asteraceae plants from Peru (2011544).
- Florida A and M University, Tallahassee, Florida. 2 beetles from Costa Rica (2010176).
- Florida Department of Agriculture and Consumer Services, Gainesville, Florida. 6 crustacea: copepods (2012216).
- Florida International University, Miami, Florida. 23 gastropods (2009072).
- Florida Marine Research Institute, Port Manatee, Florida. 41 fish specimens (2012855).
- Florida Museum of Natural History, Gainesville, Florida. 3 fish specimens (2010621), 50 gastropods (2011520).
- Florida State Museum, Gainesville, Florida. 4 living gastropods

- (2009014), 305 gastropods: mollusks (2009363, 2009515). Florida State University, Tallahassee, Florida. 34 copepods (2010521). Floristic Surveys of the Southwest Program, Texas. 53 fish specimen (2008769). Forest Research Center, Sabah, Malaysia. 233 National Cancer Institute vouchers from Borneo (1046474). Forschungsinstitut Und Naturmuseum Senckenberg, Frankfurt, Germany. 1 plant specimen from Nicaragua (2012971). Fort Wayne Children's Zoo, Fort Wayne, Indiana. 1 Tasmanian devil (2012191). Friday Harbor Laboratories, Friday Harbor, Washington. 1 mollusk: gastropod (1046341). Fundacao Universidade Estadual de Maringa, Maringa, Brazil. 39 fish specimens (2009607). George Mason University, Fairfax, Virginia. 1 mollusk (2010734). George Washington University, Washington, D.C. 147 gastropods (2013096). Gulf Coast Research Laboratory, Ocean Springs, Mississippi. 75 gastropods (2011374), 2 cumaceans (2011435), 2 hermit crabs (2011825), 25 crustacea: copepods (2012024). Hallym University, Chunchon, Korea. 1 mite (2007413). Harbor Branch Oceanographic Institution, Fort Pierce, Florida. 4 mollusks: gastropods (1046438), 3 sea sponges (2013347). Harvard University, Cambridge, Massachusetts. 6 mollusks: gastropods (1046314). Harvard University Herbaria, Cambridge, Massachusetts. National Cancer Institute vouchers: 1 of Mimosaceae from Indonesia (1046492), 112 from Sulawesi, Indonesia (1046500). Hopkins Marine Station, Pacific Grove, California. 2 starfish (1046458). Illinois Natural History Survey, Champaign, Illinois. 111 vascular plants from the West Indies (2007021), 18 liverworts (2011383). Indian River Coastal Zone Museum, Fort Pierce, Florida. 15 mollusks: gastropods (1046387). Indiana University, Bloomington, Indiana. 2 Fabaceae plants (2010818). INP-CRIP Puerto Morelos, Quintana Roo, Mexico. 14 black corals (2008416). Institut für Systematische Botanik der Ludwig-Maximilians-Universität, München, Germany. 12 plants from Guatemala, Peru, and Ecuador (2011753). Institut Royal des Sciences Naturelles, Bruxelles, Belgium. 1 neo-tropical beetle (2009880). Institute for Cambrian Studies, Boulder, Colorado. 8 Early Middle Cambrian fossils from Nevada (2010697). Institute of Ecosystem Studies, Millbrook, New York. 19 crustacea: copepods (2008940). Institute of Marine Biology, Taiwan, Republic of China. 14 specimens of deep-sea fishes and hagfishes from Taiwan (2011606). Instituto de Botanica Darwinion, Buenos Aires, Argentina. 113 vascular plant specimens (2009701). Instituto de Botanica del Nordeste, Corrientes, Argentina. 5 Acanthaceae plants from Brazil (2010773). Instituto de Fitosanidad, Colegio de Postgraduados, Caixa Postal, Mexico. 2 beetles (2004466). Instituto de Biodiversidad, Santo Domingo, Costa Rica. 10 beetles (2009858). Instituto Nacional de Pesquisas de Amazonia, Manaus, Brazil. 305 plants (2009821), 24 Sapindaceae plants (2011147). Instituto Superior de Entomologia, Tucuman, Argentina. 14 bat flies (2009288). Instituto de Zoologia Tropical, Caracas, Venezuela. 18 fish specimens (2011373). Inter-American Tropical Tuna Commission, La Jolla, California. 1 fish specimen (2010280). J.L.B. Smith Institute of Ichthyology, Grahamstown, South Africa. 1 fish specimen (2011349). Jagiellonian University, Krakow, Poland. 15 caddisflies from South Korea (2011614). James Cook University of North Queensland, Queensland, Australia. 5 fish specimens (2011441). James Madison University, Harrisonburg, Virginia. 17 crustacea: copepods (2010456). Japan Marine Science and Technology Center, Yokosuka, Japan. 8 gastropods (2009439). JoJo Resort, Seisui, Japan. 1 mollusk: gastropod (2012622). Kansas State University, Manhattan, Kansas. 8 mites from Ecuador and Panama (2011921). La Universidad, Maracaibo, Venezuela. 12 mollusks (2008183). Los Angeles County Museum of Natural History, Los Angeles, California. 10 mollusks: gastropods (1046436, 1046441). Marine and Environmental Research Institute of Pohnpei, Pohnpei, Federated States of Micronesia. 23 sea cucumbers (2008319). Marine Science Center, Massachusetts. 12 slides of serial sections of nemertean worms (1043989). Milwaukee Public Museum, Milwaukee, Wisconsin. 15 fish specimens (2010556). Ministry of Fisheries, Nha Trang City, Vietnam. 3 scallops (2009197). Missouri Botanical Garden, St. Louis, Missouri. National Cancer Institute vouchers: 3 from Madagascar (1046468), 195 from Madagascar (1046471), 1 of Lauraceae from Madagascar (1046495), and 449 from Africa and Madagascar (1046499); 51 plants (2005890), 83 various plants from Madagascar, Ecuador, and Nicaragua (2006325), 4 Acanthaceae plants from Bolivia (2007890), 28 Acanthaceae plants from Ecuador (2007892), 25 plant specimens from Colombia (2009835), 35 Phanerogams from the Dominican Republic (2009973), 20 Lichens from Surinam (2010016), 1 Gesneriaceae from Belgium (2010307), 17 Asteraceae from Mexico, Belize, Panama, Guatemala, and Honduras (2010342), 701 Asteraceae from Paraguay (2010812), 36 NCI

- Vouchers from Africa and Madagascar (2011170), 272 Asteraceae from Paraguay (2011536), 198 Acanthaceae plants from Paraguay (2012140), 4 Theaceae plants from Ecuador (2012315), 246 Asteraceae from Ecuador (2012454), 7 Gesneriaceae plants from Peru (2012927), 9 Gesneriaceae plants from Suriname (2012928), 22 Gesneriaceae plants from Ecuador (2012930), 2 Tiliaceae from Suriname (2012966), 9 Asteraceae plants from Suriname (2013120).
- Museo de Historia Natural La Salle, Caracas, Venezuela. 12 flowering plants from Venezuela (2007509).
- Museo de Zoología, Concepcion, Chile. 6 moths (2012161).
- Museo Geológico del Seminario de Barcelona, Barcelona, Spain. 1 coral (2011252).
- Museu Botânico Municipal, Curitiba, Brazil. 286 Asteraceae plants from Brazil (2004478, 2010233, 2010531, 2011464, 2011935, 2012199, 2013131).
- Museu de Ciências e Tecnologia, Porto Alegre, Brazil. 2 fish specimens (2010619).
- Museu de Ciências Naturais, Caxias do Sul, Brazil. 221 plants from Brazil (2009822, 2010052, 2010259, 2011571).
- Museu de Zoologia, Sao Paulo, Brazil. 1 fish specimen (2011445).
- Musee National d'Histoire Naturelle, Paris, France. 13 published octocoral types (1046254), 9 mollusks: gastropods (1046406), 45 corals from New Caledonia (2010861).
- Museum of Paleontology, Berkeley, California. 21 gastropods (1046330, 2009503).
- Museum of Victoria, Melbourne Victoria, Australia. 12 mollusk bivalve vouchers (1046345).
- Nationaal Natuurhistorisch Museum, Leiden, The Netherlands. 7 corals (2008504).
- National Institute of Hygiene and Epidemiology, Hanoi, Vietnam. 22 crustacea: copepods (2009200).
- National Institute of Water and Atmospheric Research, Kilbirnie, New Zealand. 2 fossil corals (2011251).
- National Museum of Natural History, Leiden, The Netherlands. 29 corals (2012836).
- National Natuurhistorisch Museum, The Netherlands. 1 mollusk (2011893).
- National Science Museum, Tokyo, Japan. 359 specimens of marine shore fishes (2009302), 7 sawflies (2010553).
- National Taiwan Ocean University, Keelung, Taiwan. 5 shrimp (2009138).
- National Tsing Hua University, Taiwan, Republic of China. 1 fish specimen (2011663).
- National University of Singapore, Lower Kent Ridge Road, Singapore. 10 crabs (2008752, 2008755).
- Natural History Museum and Institute, Chiba, Japan. 1 crab (2008462).
- Natural History Museum, Los Angeles, California. 10 crustacea: isopods (2010748).
- Natural History Museum, San Diego, California. 4 caddisflies (2010293).
- Naturhistorisches Museum Basel, Basel, Switzerland. 1,000 bryozoans (2008767), 23 neo-tropical beetles from the Caribbean (2010256).
- New York Botanical Garden, New York, New York. National Cancer Institute vouchers: 26 from Belize and South America (1046467), 3 from Bolivia (1046470), 132 from Bolivia, Belize and Dominica (1046472), 67 from Belize, Dominica, Bolivia, Peru and Fairchild Tropical Garden (1046475), 9 from Belize and Dominica (1046476), 7 from Colombia, Dominica and Fairchild Tropical Garden (1046477), 9 from Martinique and South America (1046480), 2 from Guatemala (1046481), 12 from Guatemala (1046485), 16 from South America (1046486), 19 from Dominica, Central America and South America (1046487), 29 from Central and South America (1046490), 4 of Asteraceae from Dominica and Belize (1046491), 6 from Colombia and Ecuador (1046493), 2 of Anacardiaceae from Belize and Orchidaceae from Dominica (1046496), 14 of Asteraceae plants from Guyana (1046497), 2 of Actinidiaceae plants from Colombia (1046498); 107 from Guatemala (2010206), 13 from Belize and Bolivia (2010842), 151 from Guatemala (2011050), 96 from Belize (2011094), 48 vouchers from Ecuador (2011543), 14 from Ecuador (2011727), and 100 from Dominica, Ecuador and Paraguay (2012659); 215 plants (2002110), 31 plants (2009574), 16 Asteraceae plants from Brazil and Bolivia (2010187), 18 plant specimens (2010666), 27 Acanthaceae, Asteraceae, Sapindaceae and Tiliaceae plants from Brazil and Bolivia (2011710),
- North Carolina State University, Raleigh, North Carolina. 2 plant specimens (2010539).
- North of England Zoological Society, Chester, United Kingdom. 300 fish specimens from Nigeria (2009796).
- Northeastern University, Nahant, Massachusetts. 19 polychaete worms (2010088).
- NOVA Southeastern University, Dania, Florida. 2 sea cucumbers (2009534), 1 crab (2009816).
- Oklahoma State University, Stillwater, Oklahoma. 138 mollusks (2008724), 50 snails (2009313).
- Old Dominion University, Norfolk, Virginia. 1 crustacean (2009902).
- Oregon State University, Corvallis, Oregon. 1 lichen from New Mexico (2009139), 36 mites (2008964, 2010107).
- Paleontological Institute, Moscow, Russia. 33 Early and Middle Ordovician fossils (2010642).
- Philippine National Herbarium, Manila, Philippines. 3 ferns from the Philippine Islands (2012385).
- Plant Protection Research Institute, Pretoria, South Africa. 12 neo-tropical lace bugs (2008650), 9 mites (2008943).
- Pontificia Universita Catolica do Rio Grande do Sul, Porto Alegre, Brazil. 230 fish specimens (2012170, 2012586).
- Purdue University, West Lafayette, Indiana. 9 dance flies (2008132).

- Rijksherbarium, Leiden, The Netherlands. 7 National Cancer Institute vouchers from Northern Sumatra (1046482).
- Rijksmuseum van Natural Historie, The Netherlands. 4 mollusks: gastropods (1046451).
- Rosenstiel School of Marine and Atmospheric Sciences, Miami, Florida. 6 gastropods (1046337, 1046338), 9,200 echinoids (1046483).
- Royal Botanic Gardens, Sydney New South Wales, Australia. 75 plants (2004840), 1 Commelinaceae plant from Asia (2012722).
- Royal Ontario Museum, Toronto, Ontario, Canada. 1 hydrozoan from Bermuda (2010138), 1 foraminifera from Bermuda (2012767).
- Russian Academy of Sciences, P.P. Shirshov Institute of Oceanology, Moscow, Russia. 2 fish specimens (2010717).
- San Diego Zoo, San Diego, California. 1 gazelle skin, skull, and skeleton (2011366).
- Santa Barbara Botanic Gardens, Santa Barbara, California. 43 lichens (2010615).
- Scripps Institution of Oceanography, La Jolla, California. 10 fish specimens (2007449), 732 crustacea: copepods (2010126).
- Smithsonian Tropical Research Institute, Balboa, Panama. 9 Acanthaceae plants from Panama (2009010).
- South African Museum, Cape Town, South Africa. 27 fig wasps from Namibia and Tanzania (2011482).
- Southeast Louisiana University, Hammond, Louisiana. 211 crustacea: copepods (2008958), 27 leeches (2012152).
- Southwest Texas University, San Marcos, Texas. 46 fossil plants (2009584).
- State of New Mexico, Santa Fe, New Mexico. 50 gastropods (2011397).
- State of West Virginia, Charles Town, West Virginia. 4 beetles from Mexico (2009885).
- Station Biologique de la Tour du Valat, Arles, France. 4 protozoans (2008403).
- Swedish Museum of Natural History, Stockholm, Sweden. 2 gastropods (1046343), 8 crustaceans (2010488), 17 fish specimens (2010625).
- Tennessee Aquarium, Chattanooga, Tennessee. 5 crustacea: copepods (2012606).
- Terminix International, Anaheim, California. 20 moths; larvae and adults (2008906).
- Texas A and M University, College Station, Galveston, Texas. 9 amphipods from Mexico (1046059), 4 beetles (2007142), 1 shrimp (2010150), 3 ostracods from the Bahamas (2010935), 10 crustaceans (2013036).
- The Academy of Natural Sciences, Philadelphia, Pennsylvania. 10 gastropods (2011347).
- The Australian Museum, Sydney, Australia. 40 gastropod vouchers for consumptive analysis (2009142), 35 gastropods (2009646), 3 isopods (2010754), 1 mollusk: gastropod (2012401), 18 worms (2012490).
- The College of William and Mary, Gloucester Point, Virginia. 9 shrimps (2011472).
- The Colorado College, Colorado Springs, Colorado. 51 sponges from the Manitou (2011113).
- The Morton Arboretum, Lisle, Illinois. 500 NCI vouchers (2010099).
- The Natural History Museum, London, United Kingdom. 16 scales from the South Pacific areas (2008457), 447 white flies (2009413), 40 crustacea: copepods (2009617), 8 parasitic wasps from New Zealand (2009851), 1 mollusk: gastropod (2011640).
- The Ohio State University, Columbus, Ohio. 4 mollusks: gastropods (1046324).
- The University of Arizona, Tucson, Arizona. 3 fish specimens (2013095).
- The University of Hong Kong, Yeun Long New Territories, Hong Kong. 1 moth (2010329).
- The University of Kansas, Natural History Museum, Lawrence, Kansas. 1 shrew skull and skeleton (2012697).
- The University of Texas, El Paso, Texas. 1 mollusk (2009137).
- Tianjin Animal and Plant Quarantine Bureau, Tianjin, China. 98 beetles (2007583).
- Tokyo University of Fisheries, Tokyo, Japan. 2 mollusks: gastropods (1046357).
- Toyama University, Toyama, Japan. 4 echinoderms (2011116).
- Tulane University, New Orleans, Louisiana. 45 mollusks: gastropods (1046392, 1046434, 1046437).
- United States Forest Station, Pineville, Louisiana. 125 mites (2012611).
- United States Army Engineer Waterways Experiment Station, Vicksburg, Mississippi. 218 crustacea: copepods (2011525).
- United States Department of Commerce, National Oceanic and Atmospheric Administration, Byron, Texas. 1 coral (2008951).
- United States Department of the Interior, Bureau of Land Management, Boise, Idaho. 2 lichens from Washington and from Idaho (2011868).
- United States Department of The Interior, National Park Service, Death Valley, California. 85 freshwater gastropods (2011792).
- Universidad Central de Venezuela, Caracas, Venezuela. 38 plants (2004418).
- Universidad de Puerto Rico, Humacao, Puerto Rico. 1 mollusk: gastropod (1046440).
- Universidad Nacional, Bogota, Colombia. 63 plant specimens (2008467).
- Universidad Nacional Autonoma de Mexico, Mexico City, Mexico. 7 crustacea: shrimps (1046205), 12 holothurians and ophiuroids (2009190), 2 brittlestars (2009868).
- Universidad Nacional Autonoma de Mexico, Coyoacan, Mexico. 7 mites (2009083, 2009085).
- Universidad Nacional Autonoma de Nicaragua, Managua, Nicaragua. 80 crustacea: copepod (2009619).
- Universidad Nacional del Mar del Plata, Mar del Plata, Mexico. 8 hermit crabs (2009409), 2 crustaceans: crabs (2012640).
- Universidad Nacional Mayor de San Marcos, Museo de Historia

- Natural, Lima, Peru. 4,206 fish specimens (2012392, 2012601), 1,062 vascular plants (2012463).
- Universidade de Sao Paulo, Sao Paulo, Brazil. 34 copepods (2007950), 41 Asteraceae plants (2010013), 12 crustacea: copepods (2010452).
- Universidade Estadual de Campinas, Sao Paulo, Brazil. 13 plants (2003291), 15 spiders (2007364).
- Universidade Federal de Minas Gerais, Minas Gerais, Brazil. 145 Asteraceae and Acanthaceae plants (2010732).
- Universidade Federal de Santa Catarina, Santa Catarina, Brazil. 10 mollusks (2012624).
- Universidade Federal do Parana, Curitiba, Brazil. 13 crustacea: copepods (2011285).
- Universidade Federal do Piaui, Teresina, Brazil. 8 Sapindaceae plants (2011149).
- Universidade Federal do Rio de Janeiro, Rio de Janeiro, Brazil. 8 fish specimens (2010318), 4 mollusks: gastropods (2012414).
- Universidade Federal Rural de Pernambuco, Recife, Brazil. 128 plant specimens (2004497).
- Universidade Federal Rural do Rio de Janeiro, Rio de Janeiro, Brazil. 22 crustacea: copepods (2009700).
- Universitat Hamburg, Hamburg, Germany. 5 fish specimens (2011579, 2011604).
- Universitat Zurich-Irchel, Zurich, Switzerland. 561 shore flies from India, Tanzania, and Seychelles (2009210).
- Universiteit van Amsterdam, Zoologisch Museum, Amsterdam, The Netherlands. 7 mollusks: gastropod (2010248, 2013063).
- Universiteit Bielefeld, Bielefeld, Germany. 11 crustacea: copepods (2009933).
- University of Aarhus, Aarhus, Denmark. 2 plant specimens from Ecuador (2012728).
- University of Arizona, Tucson, Arizona. 16 aphids (2008897), 1 parasitic wasp (2011201).
- University of Bergen, Bergen, Norway. 2 caddisflies (2008675), 100 crustacea: copepods from the Bahamas (2013843).
- University of Bristol, Bristol, United Kingdom. 2 fish specimens (2011581).
- University of California-Berkeley, Berkeley, California. 40 gastropods from Marble Canyon (2009073), 44 stomatopods from Lizard Island (2009098), 20 beetles from Mexico (2009380).
- University of California-Bishop, Bishop, California. 50 mollusks: gastropods (2012408).
- University of California-Davis, Davis, California. 200 seed wasps (2007854), 13 Asteraceae plants (2005672, 2012804).
- University of California-Irvine, Irvine, California. 9 hydrzoans (2008496).
- University of California-Los Angeles, Los Angeles, California. 10 crustacea: isopods (1046181), 2 beetles from Costa Rica (2009260).
- University of California-Riverside, Riverside, California. 40 fossil plants (2009603), 5 Gesneriaceae plants from Mexico and Costa Rica (2011953).
- University of Central Oklahoma, Edmond, Oklahoma. 7 caddisflies from the West Indies (2008331), 8 leeches (2010768).
- University of Colorado Museum, Boulder, Colorado. 1 lichen (2010357).
- University of Copenhagen, Copenhagen, Denmark. 5 mollusks: gastropods (1046360), 6 polychaete worms (2010803).
- University of Delaware, Lewes, Delaware. 26 flatworms (2009864).
- University of Florida, Florida Museum of Natural History, Gainesville, Florida. 3 gastropods (2009189).
- University of Florida, Tropical Research and Education Center, Homestead, Florida. 473 plant bugs, lace bugs and other various specimens from Florida, Costa Rica, and Trinidad (2008474), 98 plant bugs from Jamaica and the Bahamas, lace bugs from Ecuador, notonectidae from Florida, and saldididae from the Dominican Republic (2008847).
- University of Georgia, Aiken, South Carolina. 36 copepods (2010528).
- University of Glasgow, Hunterian Museum, Glasgow, Scotland. 2 casts of theropod caudal vertebrae (2010783).
- University of Guam, Mangilao, Guam. 5 bamboo plants (2009981), 13 mollusks with egg samples (2011734), 11 tunicate worms (2012115).
- University of Guelph, Guelph, Ontario, Canada. 1 fern (2010608).
- University of Helsinki, Helsinki, Finland. 5 lichens from Finland and Italy (2009140).
- University of Illinois, Urbana, Illinois. 26 plant specimens (2012999).
- University of Kansas, Lawrence, Kansas. 1 coral (2010072), 2 sea anemone (2008401).
- University of Maine, Orono, Maine. 61 echinoderms: sea stars (2008346), 123 echinoderms from Antarctica (2009227), 129 echinoderms from Antarctica (2009510), 204 sea stars and sea urchins (2009621), 267 asteroids and echinoids, (2010354), 81 crustaceans (2010596), 258 asteroids, echinoids, sponges, brachiopods, mollusks and corals (2010784), 109 echinoderms, crustaceans and worms (2011952), 261 echinoderms, coelenterata, mollusks, and crustacea (2012225), 102 echinoderms: starfish and crustacea: decapods (2013180).
- University of Maryland, College Park, Maryland. 5 mollusks: gastropods (1046347).
- University of Massachusetts, Amherst, Massachusetts. 30 mollusks: gastropods (1046368).
- University of Miami, Miami, Florida. 1 sea cucumber (2009737).
- University of Michigan, Ann Arbor, Michigan. 3 mites (2010355), 26 Sapindaceae plants from Ecuador (2011981).
- University of Minnesota, St. Paul, Minnesota. 47 neo-tropical caddisflies (2008341).
- University of Nebraska, Nebraska State Museum, Lincoln, Nebraska. 4 crustaceans (2009905), 5 beetles (2012443).
- University of New Hampshire, Durham, New Hampshire. 6 caddisflies (2010962), 7 plant specimens (2011381), 21 Poaceae

- plants from Bolivia (2012023), 39 Asteraceae plants from Bolivia (2012032), 7 Phanerogam plants from Bolivia (2012456).
- University of North Dakota, Grand Forks, North Dakota. 1 terrestrial gastropod (2009572).
- University of Oklahoma, Norman, Oklahoma. 25 water beetles from Panama (2012823).
- University of Oklahoma, Stillwater, Oklahoma. 40 gastropods (2011343).
- University of Puerto Rico, Lajas, Puerto Rico. 328 copepods from Puerto Rico and Gulf of Mexico (1042787), 131 crustacea: copepods (2011214).
- University of Puget Sound, Slater Museum, Tacoma, Washington. 2 dragonflies (2008438).
- University of Rhode Island, Kingston, Rhode Island. 71 polychaete worms (2009488).
- University of Rhode Island, Narragansett, Rhode Island. 106 copepods from Alvin volcano (1043522).
- University of Seville, Sevilla, Spain. 4 crabs (2008563).
- University of South Carolina, Aiken, South Carolina. 1 copepod from Transylvania (2007971), 122 crustacea: copepods (2009562).
- University of South Florida, Tampa Florida. 1 Acanthaceae plant (2012461).
- University of Southern California, Los Angeles, California. 3 sponges (2010073).
- University of Southwestern Louisiana, Lafayette, Louisiana. 1 stomatopod from Gulf of Mexico (2009400), 1 moth (2011359).
- University of Stellenbosch, Stellenbosch, South Africa. 2 moths (2006035).
- University of Tennessee, Knoxville, Tennessee. 6 caddisflies (2009371).
- University of Texas, El Paso, Texas. 41 gastropods (2010367, 2010573).
- University of Victoria, Victoria, Canada. 286 crustacea: copepods (2012753).
- University of Washington, Friday Harbor Laboratories, Friday Harbor, Washington. 1 gastropod (1046341).
- University of Washington, Seattle, Washington. 195 crustacean: copepods (2012753), 3 scallops from Vietnam (2009197).
- University of the West Indies, Jamaica, West Indies. 91 aquatic beetles (2010866).
- University of Wisconsin, Madison, Wisconsin. 81 plant specimens from Ecuador (2010311), 2 limestone conodont animal specimens (2011644).
- University of the Witwatersrand, Johannesburg, South Africa. 25 mites from South Africa (2007428).
- Virginia Institute of Marine Science, Gloucester Point, Virginia. 3 crustaceans (2012647), 3 mollusks: gastropods (2009958).
- Westark Community College, Fort Smith, Arkansas. 12 fish specimens (2012080).
- Western Australian Museum, Perth, Western Australia. 16 fish specimens (2009740, 2013097).
- Western Washington University, Bellingham, Washington. 6 tertiary bryozoans (2012065).
- Woods Hole Marine Biological Laboratory, Woods Hole, Massachusetts. 12 mollusks: gastropods (1046393).
- Woods Hole Oceanographic Institution, Woods Hole, Massachusetts. 87 mollusks (2012431), 5 mollusks (2010085), 8 crustacea: copepods (2008598).
- Yokohama National University, Yokohama, Japan. 50 mollusks: gastropods (1046363).
- Zoological Institute, Russian Academy of Sciences, St. Petersburg, Russia. 3 beetles (2008980).
- Zoologisches Institut und Museum der Universität Hamburg, Hamburg, Germany. 3 gastropods: (2008068).
- Switzerland. 4 plant specimens from Madagascar and the Canary Islands (2013004).
- Departamento de Recursos Naturales, Puerto de Tierra, Puerto Rico. 55 vascular plants from Puerto Rico (2011386).
- Forschungsinstitut und Naturmuseum Senckenberg, Frankfurt, Germany. 2 casts of Hipparion skulls (2010835).
- Institut für Systematische Botanik der Ludwig-Maximilians-Universität, München, Germany. 13 plant specimens (2013099).
- Instituto de Botanica Darwinion, San Isidro Buenos Aires, Argentina. 19 vascular plant specimens (2009692).
- Iowa State University, Ames, Iowa. 24 plants from Puerto Rico and Central America (2009048).
- Missouri Botanical Garden, St. Louis, Missouri. 11 vascular plant specimens from Bolivia (2012316), 100 mosses (2012633), 118 vascular plant specimens from Suriname (2013006), 21 plant specimens from Ecuador (2013104).
- Museu Nacional, Rio de Janeiro, Brazil. 3 meteorite chips (2012097).
- National Institute of Agro-Environmental Sciences, Tsukuba, Japan. 1 flower fly (2008584).
- National Science Museum, Tsukuba, Japan. 25 lichens (2011846).
- Naturhistorisches Museum Basel, Basel, Switzerland. 145 insects from Europe (2008666).
- Oklahoma Museum of Natural History, Norman, Oklahoma. 12 casts of Cretaceous mammals (2009998).
- Royal Botanic Gardens (Kew), Surrey, England. 128 vascular plant specimens from Brazil, Bolivia, and Indonesia (2012937).
- Servicio Agrícola y Ganadero, Santiago, Chile. 1 mite (2012352).
- State University of Utrecht, Utrecht, The Netherlands. 293 vascular plants from Guyana, South America (2008463).
- Swedish Museum of Natural History, Stockholm, Sweden. 60 vascular plant specimens from Europe, Asia, and Costa Rica (2009901).

#### *Institutional Exchanges*

- Burke Museum, University of Washington, Seattle, Washington. 3 shearwater skeletons (2009615).
- Carnegie Museum of Natural History, Pittsburgh, Pennsylvania. 2 beetles from Mexico (2011310).
- Conservatoire et Jardin Botaniques de la Ville de Geneve, Geneve,

- Texas Christian University, Fort Worth, Texas. 13 meteorites (2012144).
- The Australian Museum, Sydney, Australia. 24 corals (1046245).
- The Natural History Museum, London, England. 1 meteorite (2011175).
- University of Uppsala, Uppsala, Sweden. 50 lichens: fungi (2008602), 19 lichens from Australia, New Zealand, and Switzerland (2012302).
- Western Washington University, Sedro Wooley, California. 6 hermit crabs (2009076).
- Zoological Institute, St. Petersburg, Russia. 2 flies (2008134).
- Zoological Museum, Copenhagen, Denmark. 3 bird skeletons (2008038).
- Institutional Transfers*
- Geological Survey of Canada, Calgary, Alberta, Canada. 14 Lower Devonian rugose corals from Western North America (2010270).
- Penn State University, University Park, Pennsylvania. 79 ice worms (1046271).
- Unidad Chetumal, Departamento de Ecología y Sistemática Acuáticas, El Colegio de la Frontera Sur, Quintana Roo, Mexico. 6 type specimens of hard corals from Clipperton Island (2010794).
- University of California, Santa Barbara, California. 1,058 neuston samples (2012286).
- Intramural Transfers*
- National Marine Fisheries Service, Washington, D.C. 70 marine mollusks and crustaceans (2007951).
- National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Systematics Laboratory, Washington, D.C. 33 fish specimens from Bermuda (2008914), 21 fish specimens (2009911, 2009912), 100 specimens of juvenile fish (2010394), 100 miscellaneous marine fishes from the North Atlantic (2011692), 35 specimens of miscellaneous marine fishes from Belize (2012859).
- National Science Foundation, Office of Polar Programs, Arlington, Virginia. 1,058 unsorted invertebrate neuston samples (2012286).
- National Zoological Park, Washington, D.C. 29 bird skins and skeletons as part of the annual transfer of specimens from the Zoo (2008079), 30 mammal study skins and skeletons (2009557).
- Smithsonian Institution, National Museum of Natural History, Department of Entomology. 3 Pleistocene millipeds from the Skyline Caverns, Front Royal, Virginia (2010281).
- Smithsonian Institution, National Museum of Natural History, Department of Invertebrate Zoology. 9 fossil bivalves (2010798).
- Smithsonian Institution, National Museum of Natural History, Department of Vertebrate Zoology; Division of Fishes. 6 parasitic crustacea: Isopoda (2013286).
- Smithsonian Marine Station at Link Port, Fort Pierce, Florida. 2 polychaete worms (2012051).
- Smithsonian Oceanographic Sorting Center, Museum Support Center, Suitland, Maryland. 211 mollusks: gastropods: Dell Antarctic Types (1046319).
- Smithsonian Oceanographic Sorting Center, Navy Yard, Washington, D.C. 1 mollusk: gastropod (1046389).
- Smithsonian Tropical Research Institute, Balboa, Panama. 5 specimens of *Halichoeres salmodorialis*, MS Holotype and Paratypes (2011545).
- United States Department of the Interior, Bureau of Commercial Fisheries, Miami, Florida. 1 crustacea: isopoda (1046182).
- United States Department of the Interior, Minerals Management Service, Washington, D.C. 79 polychaete and unsorted nemertean worms (1046271).
- United States Department of the Interior, United States Fish and Wildlife Service, Blackwater Natural Wildlife Refuge, Cambridge, Massachusetts. 25 Delmarva fox squirrels (2006505).
- United States Department of the Interior, United States Geological Survey, Biological Resources Division, Gainesville, Florida. 184 fish specimens from the Gulf of Mexico (2012565).
- United States Department of the Interior, United States Geological Survey, United States Biological Resources Division, Washington, D.C. 196 specimens (2008080).
- United States Department of the Interior, United States Geological Survey, Branch of Paleontology and Stratigraphy, Reston, Virginia. 2 mollusks: bivalves (1046365).
- United States Department of the Interior, United States Geological Survey, Denver Federal Center, Denver, Colorado. 62 ammonites from the Upper Cretaceous: Albian in northeastern Texas (2010059), 18 cephalopod types from the late Maastrichtian Elk Butte in South Dakota, and Nebraska (2010933).
- United States Department of The Interior, United States Geological Survey, Menlo Park, California. 4 mollusks: bivalves (1046354).
- United States Environmental Protection Agency, National Exposure Research Laboratory, Cincinnati, Ohio. 43,573 freshwater fish specimens from the eastern United States (2008267, 2009248).
- United States Fish and Wildlife Service, Law Enforcement, Baltimore, Maryland. 6 type specimens of hard corals from Clipperton Island (2010794).
- Collected for Museum*
- Smithsonian Institution, National Museum of Natural History, Biodiversity Programs Office. 219 bats from Guyana (2010769), 385 mammals from Peru (2012445).
- Smithsonian Institution, National Museum of Natural History, Department of Entomology. 2,286 aquatic insects (2008703), 149 aquatic insects from Maine (2008842), 1,640 beetles and other insects from Asia and Hawaii (2008880), 3,370 Burma Heteroptera, Odonata, Neuroptera

- and Coleoptera (2009522), 2 beetles: neo-tropical weevils (2009729), 1,000 aquatic Heteroptera from the Dominican Republic (2011132), 1,200 aquatic insects from the Dominican Republic (2011970), 750 true bugs and damselflies from Indonesia (2012131), 93 beetles and spiders from North America (2013215), 12,848 ground beetles from Panama, (2013226), 126 beetles (2013276).
- Smithsonian Institution, National Museum of Natural History, Department of Invertebrate Zoology. 75 mollusks: gastropods (1046313, 1046315, 1046346, 1046376, 1046384, 1046386, 2011583), 2,000 marine mollusks: gastropods + bivalves from Charleston South Carolina.
- Smithsonian Institution, National Museum of Natural History, Department of Paleobiology. 47 ash bed and rock samples (2009992).
- Smithsonian Institution, National Museum of Natural History, Department of Vertebrate Zoology; Division of Amphibians and Reptiles. 4 fluid shrews (or 4 shrews in fluid?)(1046292).
- Smithsonian Institution, National Museum of Natural History, Department of Vertebrate Zoology; Division of Birds. 2 bats (1046290).
- Smithsonian Institution, National Museum of Natural History, Department of Vertebrate Zoology, Division of Fishes. 4,500 fish from the Solomon Islands (2009263), 150 fish specimens (2011605), and 370 fish specimens from Myanmar (2011989).
- Smithsonian Institution, National Museum of Natural History, Department of Vertebrate Zoology; Division of Mammals. 2 bats from Panama (2011111), 2 Chinese rock squirrels (2013425).
- Collected for Museum/Gift*
- Smithsonian Institution, National Museum of Natural History, Office of Exhibits, Washington, D.C. 186 religious artifacts (1046036).
- Smithsonian Institution, Tropical Research Institute, Panama. 1,550 miscellaneous fishes from Panama (2010965).
- Collected for Museum/Purchase*
- Smithsonian Institution, National Museum of Natural History, Department of Anthropology, Washington, D.C. 12 wooden toys and metal domestic wares from South Africa (1046021), 11 toy trucks and wooden textile stamps from South Africa (1046022), and 6 political ephemera from South Africa (1046032).
- Personal Gifts*
- Mr. and Mrs. Ernst Albert. 15 mollusks (1046366).
- Diana Altman. 9 specimens of Abuja pottery (2010265).
- Claudia P. Arango. 16 sea spiders from South America (2011920).
- Dr. Paul H. Arnaud Jr. 4 long-legged flies (2008253).
- Pat and Virginia Arter. 2 gastropods (2008933).
- Dr. Prescott Atkinson. 11 footprint slabs from Pennsylvania (2011625).
- Dave Baker. 6 corrugata bivalves from the Phillippines (2009485).
- Dr. R. S. Beal, Jr. 39 skin beetles (2008837).
- John W. Beardsley. 35 insect scales (2012169).
- Dr. Vitor Becker. 6 neo-tropical moths (2010121), 94 ambush and plant bugs (2010744), 8 caddisflies from Arizona, Mexico, and Brazil (2012393).
- James and Karen Beckett. 1 fossil plant from the Lower Cretaceous, Parapsco Formation of Prince William County, Virginia (2010081).
- Carla Benejam. 16 echinoderms (2012783).
- Mark Bennett. 1 Eocene fossil fish dentary from the Fisher-Lane Site near Fredericksburg, VA (2010506), 1 fragment of an Eocene sea cow rib from South Carolina (2010515).
- Joseph Bernstein. 2 fossil seal pelvis and bird tarsometatarsus (2011835).
- Dr. Norris Bloomfield. 1,250 moths (2008167), 854 nearctic moths (2009286), 427 moths (2010118), 99 moths, cutworms, and inchworms (2011772).
- Jim Bourdon. 2 fossil manta ray teeth (2011247).
- Kerry F. Button. 1 shark-bitten fossil marlin vertebra from North Carolina (2009169), 1 fossil mackerel shark tooth (2009235).
- Dr. James T. Carlton. 147 nematoda worms (2012864).
- Ralph Chapman. 2 primitive mid Cambrian crustaceans (2009536).
- Terry Cirrincione. 1 archaeocete vertebra (2009232).
- Dr. Roger Clark. 9 mollusks: gastropods (2009516).
- Don Clements. 2 Eocene crabs (2009567).
- Vania R. Coelho. 4 crustacea: decapods from Brazil (2012593).
- Jim Colby. 6 fossil vertebrates (2010227).
- Dan and Cynthia Damrow. 1 fossil slab (2008992).
- Donald Dan. 33 mollusk bivalves (2009449).
- Ed Davidson. 1,677 fossil specimens: decapods including eleven casts from the United States, Guam, and Europe (2009820).
- Dr. D. L. Deonier. 64 shore flies from Florida (2009633).
- Phil and Eliza Dietz. 1 gastropod (2008933).
- Dr. H. Lois DiSalvo. 45 mollusks: gastropods (1046432).
- Carla Dove. 1 complete skull of a fossil sea robin (2009277).
- Francis Duckett. 2 mollusks: gastropods (1046362).
- Stan P. Dunagan. 2 North American freshwater sponges (2012568).
- Dr. Sidney E. Dunkle. 17 dragonflies and damselflies from Cameroon and California (2012054).
- Dr. Helen DuShane. 1 mollusk (1046326).
- Eric Eaton. 35 parasitic wasps (2010562).
- Dr. Ken Emberton. 67 mollusks from Madagascar (2008941), 39 land snails from Madagascar (2011423).
- Dr. E. Howard Evans. 413 wasps from Japan (2008613).



- Hans-Georg Evers. 28 fish specimens (2009464).
- Bill Fenzen. 1 gastropod (2008934).
- Dr. Antonio J. Ferreira. 4 gastropods (1046334, 1046335).
- Dr. Oliver S. Flint Jr. 469 caddisflies from Pennsylvania (2008702).
- Michael Folmer. 30 fossil fish from Fredericksburg (2010503).
- Dr. Rosser W. Garrison. 30 dragonflies and damselflies from Thailand (2008436).
- Dr. Patricia Gentili. 808 caddisflies from Argentina (2012437).
- Lloyd Gerhart. 3 *Pavonia* eggs (2009530).
- Raye N. Germon. 1 contrarium and fauna from inside a sea shell (2012696).
- Richard Goldberg. 14 landsnails (2008932), 1 gastropod (2008933).
- Jack Golding. 1 *Begonia* plant (2010778).
- Shireen Gonzaga. 1 gastropod (2008933).
- Yoshihiro Goto. 4 specimens of mollusk: gastropod tissue (2011430).
- Steve Gotte. 100 fossil vertebrates from the Paleogene sediments of South Carolina (2010495).
- Tom and Linda Grace. 1 gastropod (2008933).
- Lloyd and Frieda Gunther. 1 arthropod from Utah (2008792).
- Jeff Hamann. 3 landsnails (1046331).
- Dr. Rex A. Hanger. 4 lower Permian gastropods (2009500).
- Dr. Gerry M. Harasewych. 18 mollusks: gastropods and bivalves (1046457).
- Andrew A. Hay. 2 arthropods from Illinois (2011045).
- Dr. Bruce W. Hayward. 16 shallow water benthic foraminifera from New Zealand (2008660).
- Dr. Robert F. Hebel Jr. 1 full mounted Alaskan Grey Wolf (1046291).
- Sue Hobbs. 1 gastropod (2008933).
- Dr. Bert Hoeksema. 9 corals and hydrozoans (2013128).
- Dr. David A. Hubbard, Jr. 12 mollusks: gastropods (2010837, 2012945).
- Gary W. Hunt. 25 cyclopoid copepods from Oklahoma (2008361).
- Frank and Becky Hyne. 11 fossil vertebrates (2010048).
- Dr. Teruo Ishida. 43 Crustacea: copepods (2010652, 2011649).
- Ron Ison. 1 anterior end of an Eocene crocodile snout (2010494).
- Gloria Jacobs. 1 fossil crocodile from Maryland (2009608).
- Julie F. Jacobs. 1 fossil vertebra from the Cretaceous sediments in Maryland (2010075).
- Kylie Jennings. 1 piece of turbellarian tissue (2009540).
- Nicholla Johnson. 1 leech (2011859).
- Dr. Adrienne Kaeppler. 1 five string lute (2011610).
- Sally Kaicher. 1 mollusk: gastropod (1046379).
- Robert Merrill King. 24 Asteraceae plants from Colorado (2012592).
- Dr. John M. Kingsolver. 2 beetles from Mexico (2007786).
- Steve Kinyon. 437 butterflies from Africa (2010656).
- Mike Kowalski. 3 diving beetles; adults and larva (2010851).
- Dr. Victor Kuznetsov. 402 insects from Russia (2004753).
- Rosario LaCorte. 18 fish specimens (2012287).
- Dr. Jerry J. Landye. 1,841 land and freshwater mollusks (2009221), 10,509 freshwater mollusks (2010249, 2010335), 3,350 freshwater gastropods and bivalves (2011191).
- Robert R. Larsen. 30 dragonflies from New Mexico (2010884).
- Ron Leuschner. 120 moths (2010903).
- Dr. Jerry Lewis. 88 copepods from Indiana and Illinois (2008364), 55 copepods from Indiana (2008896), 27 gastropods (2010845), 11 Crustacea: copepods (2012781).
- Dawn Liberi. 4 commemorative textiles (1046006).
- Thomas R. Lipka. 12 fossil reptiles (2010213).
- Dr. John T. Longino. 100 termites (2007726).
- Larry Madrigal. 7 polyclad flatworms from American Samoa (2009823).
- Elsie Marshall. 29 gastropods (1046322).
- Dr. Linda B. McCollum. 2,876 fossil types from the early middle Cambrian Period (2009334).
- Marion McDowell. 3 mollusks: gastropods (1046391).
- Dr. Patsy McLaughlin. 3 crabs (2011789).
- Marilee McNeilus. 9 mollusks: gastropods (1046364).
- Dr. David L. Meyer. 26 Mississippian fossil types from Kentucky and Tennessee (2011196).
- Dr. Roger Naviaux. 1 tiger beetle from Bolivia (2009335).
- Dr. Gil Nelson. 2 fern and bryophyte plants from Florida (2011156).
- Ronald Ochoa. 2 mites from Costa Rica (2009021).
- Dr. J. Edward Olsen. 48 iron meteorite specimens (2012064).
- Aydin Orstan. 1 gastropod (2008933).
- Arturo Granda Paucar. 1 Asteraceae plant (2011125).
- William F. Perrin. 2,833 assorted world-wide mollusks (1044895).
- Dr. Richard Petit. 2 gastropods (2008572).
- Don Pisor. 4 mollusks from Bohol (1046323).
- Philip L. Poland. 60 gastropods (2008655).
- Perry Poon. 6 mollusks: gastropods (1046397).
- Paul and Binnie Postelnek. 6 butterflies from French Guiana (2010363).
- Aysa Prather. 2 caddisflies (2008938).
- Dr. B. Edward Reed. 134 crustaceans: copepods from Canada and Colorado (2008505).
- Dr. J. Rigby. 156 sponge types (2011437, 2012130).
- Emilio Rolan. 11 mollusk paratypes (2010115), 18 gastropods (2013035).
- Sally Ross. 1 fox squirrel (2011699).
- Dr. David E. Ruiter. 8 caddisflies from New Mexico (2012403).
- Dr. Donald W. Sada. 100 gastropods (2011358).
- Mark Sargent. 7 eggs and embryos of a white-capped parrot (2009533).
- Dr. Carl Schaefer. 1 insect from Argentina (2002100).
- Donald Schnell. 2 plant specimens (2010205).
- Philip Schmitz. 1 fossil portion of an Eocene crocodile femur (2010499).
- Susanne Schulmeister. 55 sawflies from Europe (2011190).

Dr. Donald R. Shasky. 3 mollusks: gastropods (1046433, 1046435).

Dr. William Shepard. 18 water beetles from California (2012773).

Dr. Ronald L. Shimek. 6 mollusks: gastropods (1046397).

Roderick Simmons. 27 vascular plants from Maryland and Virginia (2012718).

Dr. B. S. Singer. 1 mollusk (2009088).

Dr. Judith E. Smith. 2 protozoan specimens on glass slides (2011839).

Dr. Martin Avery Snyder. 1 gastropod (1046328).

Henry and Vangie Spafford. 1 gastropod (2008933).

Dr. Eduardo Spivak. 12 crabs (2012898).

Dr. John D. Spooner. 21 copepods from South Carolina (2010546).

Brian Stafford. 2 juvenile gray squirrels (2008902).

Dr. Karl Stephan. 3 ant-like stone beetles (2008631, 2010339).

Brent Steury. 94 vascular plant specimens from Maryland (2009895, 2011350).

Katharine Stewart. 5 mollusks: gastropods (1046359).

Dr. James E. Sublette. 400 insects (2008391).

Dr. Bo Sullivan. 230 moths (2012043).

Darrel Sullivan. 1 fossil portion of a *Smilodon* humerus (2009472).

Dr. James B. Sullivan, III. 428 insects (2009044, 2010946).

Bill Sykes. 1 *Cyperus* plant (2009038).

Dr. John F. Taylor. 5 Uppermost Cambrian fossils from Vermont (2008690).

Dr. E. Siegfried Thewke. 5 mites from Mexico, Indonesia, and the United States (2011875).

Katerina V. Thompson. 2 juvenile gray squirrels (2008902).

Dr. Christopher Tudge. 3 crabs (2010550).

Charles and Natalie Turner. 1 fossil portion of a sea cow humerus from North Carolina (2009467).

Jan and Jim Van Hoesen. 5 mammal carcasses (2012050).

Dr. Lars Vilhelmsen. 39 sawflies from Denmark (2009789, 2010833).

Roger N. Walker. 2 mollusks: gastropods (1043254).

Dr. James Wappes. 5 beetles from Mexico (2010004).

Stephen T. Welty. 5 gastropods (1046325).

John S. Wemple. 1 partial jaw, braincase, dermal plates, and vertebra of a Miocene crocodile (2009774).

Karsten Wesche. 38 plant specimens from Kenya (2009811).

Gaye Williams. 1 skull roof (2008567).

Dr. Harry Yeatman. 28 copepods from Tennessee (2009713).

#### *Gift/Purchase*

Dr. Joseph E. Eger. 1,012 insects from Brazil (2008144).

Jeremy Jacobs. 27 fossil vertebrates from Michigan (2008975).

Dr. Lois B. O'Brien. 109 insects (2009394).

#### *Purchase*

Dr. Igor Lopatin. 30,800 beetles (2007312).

Jerome Vogel. 1 ceramic palm wine container from Africa (1046033).

#### *Bequest*

D.G. Frey. 3,0065 Crustacea: branchiopods (1045056).

#### *Bequest/Gift*

Muriel Sterne. 53 shell necklaces and head ornaments from Micronesia (1045747).

#### *Collected for Museum*

Barrett Brooks. 146 algae specimens collected in Florida (2010289).

Dr. Maria Faust. 101 microalgae from Belize (1034388), 41 microalgae from Fort Pierce, Florida (2013038).

Dr. David B. Lellinger. 13 ferns from Antilles, The Netherlands (2012335).

Dr. Paul M. Peterson. 19 Rosaceae and Poaceae plants from Bolivia (2009051), 325 Poaceae plants from Australia (2012293), 283 Poaceae plants from Peru (2012661).

Gene Rosenberg. 143 green marine algae (2010288).

Dr. Rob J. Soreng. 1 grass specimen (2010714).

Mark Strong. 29 vascular plants from Maryland and Washington, D.C.

(2009404), 120 vascular plants from Florida (2012636).

Dr. Dieter C. Wasshausen. 20 Acanthaceae plants from Madagascar (2009785), 11 Acanthaceae plants from Florida (2012196).

Dr. Jeffrey Williams. 3 Crustacea: isopods and shrimps (1046192).

#### *Personal Exchange*

Dr. David Carmean. 3 sawflies (2002814).

Martin Horejsi. 1 meteorite (2012166).

Edwin Thompson. 1 meteorite (2012511).

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Dr. Igor Lopatin. 30,800 beetles (2007312).

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Bequest of Charles Francis Adams.  
*Thomas Jefferson*, 1786, oil on canvas,  
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 Anonymous. *Robert Hughes*, 1981, oil  
 on panel, by Sylvia Shap  
 (T/NPG.98.76.)

June Barnes. 1944 Shubert Theatre  
 Program for "Othello," autographed  
 by Paul Robeson (AD/NPG.99.2)  
 Verna Posever Curtis. *Scott Nearing*,  
 cast in 1963, after a 1961 original,  
 by Zena Posever (NPG.99.82)  
 Joan Kent Dillon. *Washington Irving*,  
 1860, oil on canvas, by Charles  
 Loring Elliott (NPG.99.69)  
 Marjorie Edel. *Henry James*, 1900, oil  
 on canvas, by Ellen Emmett Rand  
 (NPG.98.74); and *Henry James*,  
 1900, oil on canvas, by Ellen  
 Emmett Rand (NPG.98.75)  
 Mary Ellen Gilder. *Richard Watson  
 Gilder*, 1902–03, oil on canvas, by  
 Cecilia Beaux (NPG.98.77)  
 Charlotte Hughes. Gold-colored metal  
 letter opener, from Victor J. Evans  
 and Co., the Victor Building,  
 Washington, D. C. (NPG.POB.129)  
 Dorothy Stickney Lindsay. *Dorothy  
 Stickney*, circa 1940, oil on canvas,  
 by John Falter (T/NPG.99.72.08)  
 Northeast Foundation for Children and  
 Dr. Seymour S. Cohen, Michael  
 Cohen, and Sara Cohen. *Catherine  
 Filene Shouse*, 1974, bronze, by Elaine  
 Pear Cohen (T/NPG.98.72.04)  
 Major General George S. Patton,  
 U.S.A., Retired and the Patton  
 Family. *George S. Patton, Jr.*, 1945,  
 oil on canvas, by Boleslaw  
 Czedekowski (NPG.99.5)  
 Paul Peralta-Ramos. *Marquis de  
 Lafayette*, circa 1820, oil on canvas,  
 attached to wood panel, attributed to  
 Pierre-Paul Prud'hon (NPG.99.70)  
 Bequest of Stanley P. Sax. *David  
 Rittenhouse*, circa 1796, oil on  
 canvas, by Charles Willson Peale  
 (NPG.98.73)  
 Bettina Steinke. *Arturo Toscanini*,  
 1937, oil on canvas, by Bettina  
 Steinke (NPG.99.73)  
 Mary Louise and Benjamin Wright.  
*Benjamin Tappan*, circa 1839,  
 watercolor on ivory, by Washington  
 Blanchard (NPG.98.78)

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 Drawings**

Judy Morris, *Elia Kazan*, circa 1935,  
 charcoal drawing by Willard Downes  
 Aaron Shikler, *Mike Mansfield*, 1977,  
 oil on paper by Aaron Shikler

Les Schreyer, 29 posters, circa  
 1890s–1980s  
 Mrs. Leon Edel, *Leon Edel*, c. 1931,  
 two charcoal drawings by Louis  
 Muhlstock  
 Carol Jopling, *Rufus King*, circa 1810,  
 hollow cut silhouette, attrib. to  
 William Bache  
 Bettina Steinke, *Pierre Monteux*, circa  
 1938, charcoal by Bettina Steinke  
 Bettina Steinke, *Chester Nimitz*, circa  
 1940–45, pastel by Bettina Steinke  
 Rosina and Lisa Rubin, *Mark Rothko*,  
 circa 1935, pastel by Anna Walinska  
 Denise Bouché Fitch, *Robert  
 Motherwell*, 1955, charcoal by René  
 Bouché  
 Milton Rose, *Henry Clay*, 1843, hand-  
 colored lithograph by J. Peters;  
*Ulysses S. Grant*, 1865,  
 chromolithograph by Bingham and  
 Dodd; *William T. Sherman*,  
 lithograph by Kurz and Allison;  
*Grover Cleveland*, 1884, lithograph  
 by the Graphics Company of N.Y.;  
*Thomas A. Hendricks*, 1884,  
 lithograph published by the  
 Graphics Company of N.Y.  
 Anthony Adams, *Franklin P. Adams*,  
 circa 1935, illustrated playing card  
 by William Auerbach-Levy

**Donors to the Collection—  
 Photographs**

Anonymous donor, *Gracie Allen and  
 George Burns*, c. 1930, gelatin silver  
 print by Unidentified  
 (S/NPG.99.81). *Jack Dempsey*, c.  
 1920, gelatin silver print by  
 Unidentified (S/NPG.99.80). *Ida  
 Lupino*, 1949, gelatin silver print by  
 Unidentified (S/NPG.99.79).  
 Jane Halsman Bello, *Hans Albrecht  
 Bethe*, 1962, color transparency by  
 Philippe Halsman (T/NPG.98.96).  
*Norman Corwin*, 1945, gelatin silver  
 print by Philippe Halsman  
 (T/NPG.98.97). *Maurice Ewing*,  
 1962, gelatin silver print by  
 Philippe Halsman (T/NPG.98.98).  
*Dave Garroway*, 1962, gelatin silver  
 print by Philippe Halsman  
 (NPG.98.99). *Henry Robinson Luce*,  
 1948, gelatin silver print by  
 Philippe Halsman (NPG.98.100).  
*Beaumont Newhall*, c. 1943–48,  
 gelatin silver print by Philippe

Halsman (T/NPG.98.101.03). *Reinhold Niebuhr*, 1960, gelatin silver print by Philippe Halsman (NPG.98.102). *Norman Norell*, 1944, gelatin silver print by Philippe Halsman (NPG.98.106). *Richard Rodgers and Oscar Hammerstein II*, 1954, gelatin silver print by Philippe Halsman (NPG.98.103). *Rudolf Serkin*, 1944, gelatin silver print by Philippe Halsman (T/NPG.98.104). *Harlow Shapley*, 1946, gelatin silver print by Philippe Halsman (NPG.98.105). Steve Bello, *Freeman Dyson*, c. 1954, gelatin silver print by Francis Bello (T/NPG.98.110). *Richard Feynman*, 1954, gelatin silver print by Francis Bello (NPG.98.107). *Murray Gell-Mann*, 1956, gelatin silver print by Francis Bello (T/NPG.98.108). *Joshua Lederberg*, 1954, gelatin silver print by Francis Bello (T/NPG.98.116). *Tsung Dao Lee*, 1954, gelatin silver print by Francis Bello (T/NPG.98.112). *Allan Sandage*, 1954, gelatin silver print by Francis Bello (S/NPG.98.117). *Julian Schwinger*, 1956, gelatin silver print by Francis Bello (T/NPG.98.111). *James D. Watson*, 1954, gelatin silver print by Francis Bello (T/NPG.98.115). *Norbert Wiener*, 1953, gelatin silver print by Francis Bello (NPG.98.109). *Chen Ning Yang*, 1954, gelatin silver print by Francis Bello (T/NPG.98.113). *Jerrold Zacharias*, c. 1956, gelatin silver print by Francis Bello (T/NPG.98.114). Marjorie Edel, *Leon Edel*, c. 1955, gelatin silver print by Alvin Langdon Coburn (S/NPG.99.78). Robert D. Hale, *Beatrice Wood*, 1996, gelatin silver print by Robert D. Hale (S/NPG.99.84). Irene Halsman, *Margaret Bourke-White*, 1943, gelatin silver print by Philippe Halsman (NPG.98.93). *Varian Fry*, 1944, gelatin silver print by Philippe Halsman (S/NPG.98.95). *Philippe Halsman*, 1976, gelatin silver print by Irene Halsman (S/NPG.98.95). Family of Elia Kazan, *Elia Kazan*, 1969, gelatin silver print by Bruce McBroom (NPG.98.176). *Elia Kazan*, c. 1950, gelatin silver print

by Sam Shaw (NPG.98.174). *Elia Kazan*, 1950, gelatin silver print by Unidentified (S/NPG.98.175). Clifford and Michele Krainik, *Edward Albert, Prince of Wales*, 1860, albumen silver print by Mathew Brady (S/NPG.99.83). Arthur Leipzig, *Shari Lewis*, 1957, gelatin silver print by Arthur Leipzig (S/NPG.99.76). Maria von Matthiessen, *George Herbert Walker Bush*, 1986, gelatin silver print by Maria von Matthiessen (S/NPG.99.99). Willis W. Sanders, *Ernest Hemingway*, 1952, chromogenic print by Willis W. Sanders (S/NPG.99.77). Mary Louise and Benjamin Wright, *Benjamin Tappan and Mary Tappan Wright*, c. 1855, ambrotype by Unidentified (S/NPG.98.173).

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Ashland (Town of), New York (through Howard Drum). 1998 re-issue of 1898 U.S. stamp "Western Cattle in Storm" on cover, canceled (NPM 1998.2016). Charles Beuparlant. Three-dozen-capacity egg mailing crate (NPM 1999.2014). James H. Bruns. Reproduction one-dozen-capacity egg mailing crate, 1997-98 Migratory Bird Hunting and Conservation stamp (Scott No. RW64), U.S. letter carrier hat with cap badge, U.S. stamped envelope (Scott No. U436f) with 1940 USPOD philatelic exhibition cachet, 4-1941 U.S. Highway Post Office first trip covers, 1899 medal commemorating Chicago Post Office cornerstone laying, U.S. letter carrier summer hat, 22 U.S. Post Office Department uniform buttons (NPM 1999.2003). Judd Caplovich (vendor) and New Acquisitions Fund. U.S. rate and postmarking device, circa 1834, from East Greenwich, Rhode Island (NPM 1999.2020). John A. Corwin III (vendor) and Director's Discretionary Fund. Pocket watch and watch fob recovered from U.S. sea clerk John Starr March's body, R.M.S. *Titanic* (NPM 1998.2021). H. R. Harmer, Inc. (vendor) and Curatorial Acquisitions Fund. 1894 two-cent postal forgery (profile of George Washington) on 1895-postmarked cover (NPM 1998.2015). Myron and Judith Kaller. Full set of nine 1898 Trans-Mississippi Exposition stamps (Scott No. 285-293) on U.S. stamped envelope (Scott No. U360), canceled 1899 (NPM 1998.2020). Matthew Bennett, Inc. (vendor), American Postal Workers Union (donor) and S.I. Collection

- Acquisition Fund (donor). Washington and Alaska facing slip and April 1, 1912 letter of assignment recovered from U.S. sea clerk Oscar S. Woody's body, R.M.S. *Titanic* (NPM 1998.2017).  
 ———, and New Acquisitions Fund. Greek 1831 40-lepra postage due (?) stamp affixed to 1848-postmarked cover (NPM 1999.2013).
- Mystic Stamp Company, Inc. (through Donald Sundman). 2,297 mint United States stamps (NPM 1999.2004).
- National Archives and Record Administration, Textual Archives Services Division, Old Military and Civil Records (through Cynthia G. Fox). Mint pair of U.S. postage stamps (Scott No. 65) found in Civil War records of Lt. Henry Giesen (NPM 1999.2009).
- Mary Paul Reifsteck and Dr. Carole Reifsteck Parsons. 1949 postal savings certificate of deposit, 1947 postal savings receipt, postal savings envelope (NPM 1999.2008).
- Posten Norge BA, Postmuseet (Norway) (through Arne Woll and Arvid Lohre). 4 Norwegian postage stamps of the 10-ore post horn design (printed in 1909, 1949, 1962 and 1997 using different printing methods) (NPM 1999.2016).
- Rita Ann Richie. U.S. Post Office Department female letter carrier's beret, 9 U.S. Postal Service uniform patches (NPM 1999.2006).
- Schuyler J. Rumsey Philatelic Auctions, Inc. (vendor) and Curatorial Acquisition Fund (donor). 1864 transatlantic (U.S. to Italy) cover with three U. S. 10-cent stamps (George Washington, Scott No. 68) affixed; 1875 U. S. plate proof sheet of 100 one-cent stamps (Ben Franklin, Scott No. 40P4, reprint of 1857 issue) (NPM 1998.2019).
- Smithsonian Institution, National Museum of American History, Department of Social and Cultural History, Division of Community Life (through David Shayt). *Good Mister Mailman* sheet music (NPM 1999.2005).
- Smithsonian Institution, National Postal Museum. 589 objects (US revenue material) Found In Collection (NPM 1999.2018).
- . 252 Salvadoran philatelic objects Found In Collection. (NPM 1999.2022).
- . 923 Honduran philatelic objects Found In Collection. (NPM 1999.2024).
- Katherine Connors Springston. 11 U.S. Post Office Department travel commissions (1944–1961) issued to John J. Connors (NPM 1999.2023).
- Su Qiyun. 24 mint People's Republic of China postage stamps (1995–98 issues) (NPM 1999.2001).
- Thomas N. Tillman. Handheld postal scale (Dixie Letter Scale) of the Sturgis Manufacturing Company, Baltimore, Maryland, circa 1920–32 (NPM 1999.2021).
- David R. Torre. 5 Crow Creek Sioux Tribe waterfowl stamps (1989–90), 10 Fort Peck Tribes tribal bird/conservation license stamp and 20 reference-of-purchase copies (1976) (NPM 1999.2002).
- U.S. Department of the Interior, Fish and Wildlife Service, Federal Duck Stamp Program (through Teresa M. Bell). 1 imperforate sheet of 120, 1 self-adhesive sheet of 24, 1 souvenir program of the 1999–2000 Migratory Bird Hunting and Conservation stamp (NPM 1999.2017).
- U. S. Postal Service, Stamp Services (through Azeezaly Jaffer). 21,234 postage stamps, 58 covers, 60 postal cards, 20 commemorative panels with 72 postage stamps and 4 souvenir sheets attached, 28 souvenir programs and inserts (NPM 1998.2014).
- , Stamp Services (through Azeezaly Jaffer) 1,772 postage stamps, 60 covers, 12 postal cards, 20 commemorative panels, 22 souvenir programs and inserts (NPM 1999.2007).
- , Stamp Services, Stamp Acquisitions (through Joel Marks). 2 embossing masters for mid-20th Century Canal Zone stamped envelopes (Scott No. U20 and UC14) (NPM 1999.2010).
- , Stamp Services (through Azeezaly Jaffer) 1,668 postage stamps, 6 souvenir cards, 21 postal cards, 2 commemorative panels, 17 stamped envelopes, 23 covers, 58 souvenir programs and inserts (NPM 1999.2012).
- , U.S. Postal Inspection Service (through Daniel L. Mihalko). 2 U.S. Postal Inspector gold-plated badges (NPM 1999.2015).
- , Stamp Services (through Azeezaly Jaffer). 11,997 postage stamps, 11 souvenir sheets, 4 commemorative panels, 62 covers, 22 stamped envelopes, 5 aerograms, 14 postal cards, 54 souvenir programs (NPM 1999.2019).
- WESTVACO, Envelope Division (through Richard J. Smith). 108 U.S. and Canal Zone stamped envelopes' printing specification reference collection, 57 U.S. stamped envelopes, 2 U.S. covers with U.S. Envelope Company cachets, 1 souvenir folder (NPM 1999.2011).

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Washington. Speakers.  
Kentucky Derby Museum. Reception  
and speakers for program on  
Kentucky Derby.  
Makers Mark. Five cases of whiskey  
for Young Benefactors Gala.  
McCormick and Schmick Seafood  
Restaurants. Venue, speakers, and  
catering for program.  
Micronesia Institute. Speakers.  
Mysterious Press/Warner Books.  
Speakers.  
NASCAR. Airfare and hotel for eight  
NASCAR drivers and officials.  
National Institute of Mental Health.  
Lunch for speakers for program on  
gender differences in addiction.  
National Thoroughbred Racing  
Association. Favors at reception for  
Preakness program.  
Oasis Winery. Twenty-five cases of



wine at cost (value \$300/paid \$60 per case)

Royal Netherlands Embassy. Venue and reception.

Smithsonian Environmental Research Center. Exhibition for Microbes program.

*Town & Country Magazine*. Advertising space in magazine for *L'esprit de France*.

University of Maryland, Department of Criminal Justice. Speakers.

Washington Design Center. Venue and staff for *L'esprit de France*.

Washington Science Fiction Association. Speakers.

Washington Storytellers Theater. Speakers.

Woodford Reserve, Korbel. Reception for Kentucky Derby program.

World Bank. Venue, brochure, and speakers.

Yiddish of Greater Washington. Publicity provided for Yiddish program.

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# Chronology

## September–June

■ *Education affiliation* The National Portrait Gallery and the MCI National Sports Gallery offered joint educational programs for student groups in grades 3 through 12. At NPG, students were actively involved in interpreting portraits as they learned about individuals and themes in American history. Students explored the collections in groups guided by docents who helped them discover the American presidents, Pocahontas, Benjamin Franklin, Susan B. Anthony, Martin Luther King Jr., and others who have made important contributions to the life of the nation. At the MCI, students discovered the history of American sports while they saw sports artifacts and memorabilia from stars such as Joe Montana, Michael Jordan, Oksana Baiul, Muhammad Ali, and Babe Ruth.

## September 30–October 2

■ *Special event* The Public Corporation for the Arts affiliate in Long Beach, California, worked with The Smithsonian Associates to host a residency and concert series by the Smithsonian Jazz Masterworks Orchestra.

## October

■ *Anniversary* 1998 marked the 30th anniversary of the Smithsonian American Art Museum's Intern Program.

## October

■ *Architect/engineering contract* The Office of Contracting awarded an architect/engineering services contract to Polshek Tobey & Davis for master planning of renovations to the Castle and the Arts and Industries Building.

## October

■ *Donation* Through the generosity of longtime Smithsonian American Art Museum supporters Sheila and Richard Schwartz, Patricia and Phillip Frost, and the Sara Roby Foundation, 19 fellows are in residence for the 1998–1999 academic year, the highest number in the program's history. Among them are four Latino scholars funded through the Rockefeller Foundation initiative for Latino cultural research.

## October

■ *Chairman elected* Rosemary Ripley was elected chair of the Smithsonian Libraries' Board. Ms. Ripley is Vice President, Corporate Business Development, Philip Morris Corporation. Her father, S. Dillon Ripley, was eighth Secretary of the Smithsonian Institution.

## October

■ *Division established* Nancy E. Gwinn, Director, Smithsonian Libraries, established an Information Systems Division headed by Tom Garnett who was named Assistant Director. The division manages the Electronic Library Program which includes all on-line products and initiatives, from publication of original electronic works and digital editions of rare books to delivery of information for research in e-journals. The Libraries' Research Services Division is headed by Assistant Director Bonita Perry and the Management and Technical Services Division is headed by Assistant Director Mary Augusta Thomas.

## October

■ *Professorship appointment* SERC scientist Dr. Dennis Whigham was inducted as Professor in the Faculty of Biology, University of Utrecht, The Netherlands.

## October

- *Special event* In collaboration with the National Museum of American History, the Office of Public Affairs held the first event in its plan to encourage media coverage of the Star-Spangled Banner Preservation Project—the infrared examination of the flag by scientists from the National Aeronautics and Space Administration.

## October–December

- *Public programs* The Smithsonian Associates presents a collage of 40 public programs entitled “L’esprit de France,” focusing on the contributions of France to world civilization. A highlight of the celebration was an elegant gala evening hosted by Mary Ourisman and the Ambassador of France.

## October–September

- *Training and information briefings* The Procurement and Training Branch, Office of Contracting, continued to conduct procurement-related training courses and small-purchases informational briefings to Smithsonian staff.

## October 1

- *Exhibit opens* Great Cats, a new walk-through exhibit focusing on tigers and lions and their tenuous hold on survival, opens at the National Zoo.

## October 3

- *Event* The 20,000-pound Skylab module, a laboratory that fits inside the space shuttle’s payload bay, arrived for storage at Washington Dulles International Airport, where it will remain until it goes on display at the National Air and Space Museum’s Dulles Center.

## October 5–8

- *School program* The Smithsonian Associates launched the first of four three-day presentations by Smithsonian scientists to students, teachers, and community residents of the Spring Branch Independent School District, Houston, Texas. Subsequent visits occurred on November 16–19, 1998, January 25–28, 1999, and April 5–9, 1999. Topics included volcanology, forensic anthropology, Mexican-American folk life, and planetary geology.

## October 6

- *Benefit* The Archives of American Art honors *TIME* critic Robert Hughes at its annual gala benefit dinner in New York City.

## October 6

- *Exhibition* The Archives of American Art opens the exhibition “The Critic Sees: A Century of Art Criticism from the

Archives of American Art” in the Gallery Space of its New York Regional Center.

## October 6

- *Exhibition* “As Precious As Gold,” documenting the role of the Post Office in the 1896 Alaskan Gold Rush opens at the National Postal Museum.

## October 7

- *Management excellence* The Board of Trustees of the Archives of American Art meets in New York City at the Cooper-Hewitt, National Design Museum.

## October 7–9

- *Smithsonian Affiliations roundtable* The first annual meeting of Smithsonian affiliates took place at the Smithsonian, welcoming 44 representatives from each of the 20 affiliates. The first Smithsonian Affiliations Web site was launched as part of the conference.

## October 15

- *Exhibition and programs* “Chuck Close,” a 30-year retrospective featuring this American artist’s labor-intensive, often arresting images of the human face—many of them on canvases as tall as eight feet—opened at the Hirshhorn Museum and Sculpture Garden. In a well-attended lecture at the 675-seat amphitheater of the International Trade Center’s new Ronald Reagan Building, the artist (b. 1941), who has worked from a wheelchair since 1988, discussed his evolution from Photo-Realism to recent expressive grids of bright color. The exhibition, organized by the Museum of Modern Art in New York, attracted as many as 4,000 visitors a day and generated favorable reviews in print and on television.

## October 15–18

- *Meeting* The Tropical Research Institute cosponsored the Environmental Economic Workshop with the Ford Foundation and Fulbright at the Earl S. Tupper Research and Conference Center. The workshop was organized by the Latin American Scholarship Program for American Universities (LASPAU).

## October 16

- *Exhibition* “Mayhem by Mail,” exploring the activities of the U.S. Postal Inspection Service and crimes in the mail opens at the National Postal Museum.

## October 17

- *Exhibition* A new National Air and Space Museum planetarium show, “And a Star to Steer Her By,” opened in the Einstein Planetarium. Narrated by Sir Alec Guinness, the

30-minute feature describes how navigators have used both natural—the sun, planets, and stars—and man-made tools such as telescopes and accurate clocks to determine their location. Complementing the planetarium show is “GPS: A New Constellation,” a new exhibit that explores the global positioning system.

#### October 26

■ *Award* The Beinecke Foundation, Inc. makes a major gift of \$100,000 in support of The Brown Foundation, Inc.’s \$500,000 Challenge Grant awarded to the Archives of American Art in 1997.

#### October 27–February 2

■ *Exhibition* “Teddy Roosevelt: Icon of the American Century” was on view at the National Portrait Gallery. Roosevelt helped shape America’s transition from a provincial society to a burgeoning world power. The exhibition explored his life with more than 100 paintings, photographs, political cartoons, and memorabilia, and was co-organized with the National Park Service, U.S. Department of the Interior.

#### October 29

■ *Event* STS 95 was launched with former Senator John Glenn on board. The National Air and Space Museum set up several high-definition television monitors, allowing hundreds of visitors to watch the event live via the newest broadcast technology.

#### October 30–March 7

■ *Exhibition* The Smithsonian American Art Museum presented two complementary exhibitions that examined the California Gold Rush, in celebration of the 150th anniversary of the discovery of gold. “The Art of the Gold Rush” featured paintings, watercolors, and drawings from the 1850s and the nostalgic views created a generation later. The Smithsonian American Art Museum was the only East Coast venue for this exhibition. “Silver & Gold: Photographs of the Gold Rush” featured rare daguerreotypes documenting this exciting time in American history.

#### November

■ *Major construction contract* Construction was completed on the Cultural Resources Center of the National Museum of the American Indian to allow beneficial occupancy of the building to occur by the Smithsonian Institution.

#### November

■ *Outreach/publication* The Archives of American Art publishes *A Finding Aid to the Rockwell Kent Papers*.

#### November

■ *Symposium* The Smithsonian Libraries cosponsored with the National Anthropological Archives a symposium, “Ed-

ward S. Curtis and The North American Indian Re-Viewed” on November 16, 1998, with 160 people attending. The program was supported by the National Museum of the American Indian and held during American Indian Heritage Month in conjunction with the Libraries exhibition, “Frontier Photographer: Edward S. Curtis” (online at [www.sil.si.edu](http://www.sil.si.edu), on view in the Libraries’ Gallery October 1998–November 1999).

#### November and May

■ *Acquisitions* Among the most significant art works acquired by the National Museum of African Art were a rare set of polychromed wooden panels carved in high relief from the Nkanu peoples of the Democratic Republic of the Congo and a 92-pound D’mba mask from the Baga peoples of Guinea, one of the largest masks in all of Africa. The mask was donated to the museum by internationally known contemporary artist Armand Arman and his wife Corice, a fashion consultant and business manager. An important donation of 14 traditional sculptures from central and eastern Africa, the gift of New York businessman Lawrence Gussman, fills gaps in the museum’s collection. These sculptures were showcased at the museum.

#### November 5–7

■ *Smithsonian Council meeting* The Smithsonian Council, with 21 members present, focused on Smithsonian outreach to communities throughout the nation. Four panel discussions and a roundtable discussion with senior management and museum directors dealt with topics such as new emphases in community outreach, the relationship of outreach to SI missions and goals, the effectiveness of the structure of outreach programs, the adequacy of evaluation of outreach programs, the likely impact of decentralizing outreach management at the unit level, the extent to which outreach programs are reaching a broad range of communities (ethnic, geographical, and cultural), and whether certain outreach programs warrant expansion and others warrant downsizing or elimination. Members emphasized that SI community outreach programs should serve as two-way streets, offering benefits to the communities served, as well as to the Smithsonian, while at the same time respecting community needs and interests. This year’s meeting included directors of community organizations receiving Smithsonian services. In their panel, they offered useful perspectives from the community’s point of view. Council members offered suggestions in favor of greater oversight across units so as to avoid program duplication and more frequent program evaluations. Council members also suggested ways to generate greater clarity of expectations in SI-community partnerships, so that both the Smithsonian and the partnering communities reciprocate in the promises they make, the expectations they have, and in the benefits and outcomes that are generated. As in past years, the Council’s Report to the Secretary was widely distributed among units and staff throughout the Institution.

## November 6–February 9

■ *Exhibition* “Philippe Halsman: A Retrospective” was on view at the National Portrait Gallery. This exhibition—the first full retrospective of the work of Philippe Halsman—featured 73 vintage prints dating from the 1930s to the 1970s. With more *LIFE* magazine covers to his credit than any other photographer, Philippe Halsman documented the postwar era through countless celebrity portraits. Among the photographs included in the exhibition were Halsman’s iconic images of Albert Einstein, Marilyn Monroe, and Salvador Dali.

## November 7

■ *Public program* “Inventing for the Environment” symposium sponsored by the National Museum of American History’s Lemelson Center. Keynote address by Richard White, environmental historian, Stanford University, followed by small group sessions on the built environment, health and sanitation, industrial ecology and transportation, and constructed and idealized nature.

## November 8

■ *Exhibition* “Roy Lichtenstein: Landscapes in the Chinese Style,” an exhibiton of 28 paintings, collages, drawing, and one sculpture by this American pop artist (1923–1997), opened at the Arthur M. Sackler Gallery. The exhibition included six examples of Chinese art that inspired Lichtenstein.

## November 8

■ *Lecture* For the sixth annual Mordes Lecture in Contemporary Art at the Hirshhorn Museum and Sculpture Garden, curator and scholar Mark Rosenthal of New York’s Solomon R. Guggenheim Museum gave a talk titled “Joseph Beuys and Contemporary Art,” which probed the life and work of the German sculptor, performer, and teacher (1921–1986). Beuys has emerged as one of the most influential figures in postwar European art. Rosenthal, who is preparing a major exhibition of Beuys’s work for the Guggenheim, joined a roster of internationally respected art-world figures, among them *New York Times* critic Roberta Smith and Director Nicholas Serota of the Tate Gallery in London, Germano Celant, Peter Schjeldahl, and Richard Armstrong, who have participated in the yearly lecture series, which is underwritten by contemporary art collectors Dr. Marvin and Elayne Mordes of Baltimore.

## November 8

■ *Special event* His Holiness the Dalai Lama gave an all-day teaching at The American University in support of the Smithsonian Folklife Festival program, “Tibetan Culture Beyond the Land of Snows,” which was cosponsored by the Center for Folklife and Cultural Heritage and the Conservancy for Tibetan Art and Culture in Washington, D.C. He then attended a reception at the Smithsonian Castle afterwards to launch the Festival project.

## November 10–11

■ *Public program* “Dos Alas/Two Wings” at the National Museum of American History. Masterclasses, lectures, and performances of Puerto Rican and Cuban dancers AfroCuba de Matanzas. In conjunction with “Encuentros.”

## November 11

■ *Outreach/publication* The Archives of American Art publishes *A Finding Aid to the Tomás Ybarra-Frausto Research Material on Chicano Art, 1965–1997*.

## November 12

■ *Exhibition* The Tropical Research Institute traveling exhibition “Our Reefs: Caribbean Connections” opened in Belize City, as part of its travels through the Caribbean region. Local docents in Belize were trained to carry out an educational program that includes lectures about Carrie Bow Key, the National Museum of Natural History’s field station in Belize.

## November 13

■ *Exhibition* The new permanent exhibition and diorama “Tigers!” made its debut at the National Museum of Natural History. The exhibition, which includes a dramatic diorama scene of a tiger lunging at a deer, highlights tigers’ behavior in their native habitat. It also focuses on tiger conservation efforts.

## November 13

■ *Public program* Sarah Burns, author of *Inventing the Modern Artist: Art and Culture in Gilded Age America* (Yale University Press, 1996), and winner of the Smithsonian American Art Museum’s 1998 Charles C. Eldredge Prize for Distinguished Scholarship in American Art, discussed the subject of her book at a lecture.

## November 17

■ *Exhibition* “Unlimited by Design,” Cooper-Hewitt, National Design Museum.

## November 20

■ *Management excellence* The Archives of American Art realigns management responsibilities and streamlines operations by closing its New England Regional Center (Boston) and its Midwest Regional Center (Detroit) and consolidating functions and activities in the Washington, D.C. headquarters, New York Regional Center, and West Coast Regional Center (San Marino, California).

## November 21

■ *Public program* The National Museum of American History’s “OurStory: History Through Children’s Literature” program. Josephina Montoya, the newest American Girls doll will be featured in conjunction with “American Encounters.”

## November 22

■ *Public program* Reception and screening of documentary film "442: For the Future." Cosponsored with Japanese American Memorial Foundation.

## November 24

■ *Exhibition* The Rocks Gallery opened at the National Museum of Natural History, completing the museum's newly renovated Janet Annenberg Hooker Hall of Geology, Gems, and Minerals. The interactive gallery demonstrates how rocks are formed and how they have recorded the Earth's geological history.

## November 28

■ *Public program* "The Puerto Rican Cuatro Festival" at the National Museum of American History. Many activities throughout the day. In conjunction with "Encuentros: Latino America at the Smithsonian."

## November 30

■ *Giraffe relocation* On November 30, the Zoo's 18-month-old male Masai giraffe, Aaron, left the National Zoo in a specially equipped truck, on a trip to Atlanta, Georgia. On the truck's return trip, the Atlanta Zoo sent Ryma, a 13-year-old male of the same subspecies.

## December

■ *Education initiative* The National Postal Museum launches the "Classroom in a Can Lesson One" educational program.

## December

■ *Loeb Fellowship awards* SERC Loeb Fellowships were awarded to foster research in the exact sciences in collaboration with SERC scientists. A Loeb Fellowship was awarded to Dr. Marilyn L. Fogel of the Carnegie Institution of Washington, D.C., for research using measurements of the natural abundances of stable isotopes to obtain insights into ecological processes. Another Loeb Fellowship was awarded to Dr. Stephen D. Prince of the University of Maryland College Park to support research using remote sensing to collect environmental data at large spatial scales.

## December

■ *Publication* Volume 8, *The Papers of Joseph Henry* was written by staff of the Joseph Henry Papers Project, Smithsonian Institution Archives.

## December

■ *Research* National Museum of Natural History ichthyologist Stanley Weitzman's studies of South American fishes, primarily the characiform fish groups and catfishes, revealed

important information about the status of freshwater ecosystems and provided important, basic information in support of practical conservation measures. Weitzman was able to demonstrate that the aquatic systems within the Atlantic Forests of Brazil have been severely degraded ecologically. The report of his findings had a practical effect on the conservation thinking of Brazil's terrestrial biologists. He has also published widely, both for scientific and lay audiences, on the phylogeny of several characid subgroups reporting on reproductive biology, gross anatomy, histology of gonads, and ultrastructure of their reproductive cells. Various aspects of these studies are of practical interest to fisheries biologists in Latin America, because the literally hundreds of characid fishes are the primary forage fishes for a substantial percentage of the larger fishes suitable for human consumption in that region.

## December

■ *Satellite launch* The Submillimeter Wave Astronomy Satellite, designed by SAO for NASA, is successfully launched from a Pegasus-XL vehicle.

## December

■ *Transition process* A group of 34 employees at the Tropical Research Institute joined the administration to form committees for the STRI transition that would put in place a new employment system and administrative procedures resulting from the termination of the Panama Canal Treaties on December 31, 1999. The transition committees included the Transition Committee, Human Relations Committee, Human Resources Committee, Procedures, Policies and Operations Committee, Communications Committee, and the Valuation Committee.

## December 5

■ *Public program* NASCAR roared into the Smithsonian in a Smithsonian Associates program with president Bill France and senior vice president Brian France, with NBC newscaster Brian Williams and local sportscaster George Michael adding luster to the evening's festivities.

## December 8

■ *Special event* The Annual Appreciation Reception for the Visitor Information and Associates' Reception Center's Corps of Volunteer Information Specialists included remarks by Smithsonian Secretary I. Michael Heyman.

## December 9

■ *Zoo lecture* Knut Schmidt-Nielsen, professor emeritus at Duke University, and one of the world's most prominent animal physiologists, is awarded the National Zoo Medal for Outstanding Services to Zoological Sciences and Conservation and presents lecture to Zoo audience.

## December 10

- *Publications awards* The Office of Public Affairs was presented the following awards in the National Association of Government Communicators' Blue Pencil competition: First Place for the quarterly newsletter *Smithsonian Institution Research Reports*; First Place for *The Torch*, the employee newspaper; and First Place for the annual report, *Smithsonian Year 1997*, jointly produced with Smithsonian Institution Press.

## December 11

- *Public program* "Legacies of 1898: War, Transition, and Transformation," a discussion of community, citizenship, and sovereignty at the National Museum of American History. In conjunction with "Encuentros: Latino America at the Smithsonian."

## December 17

- *Public program* The Smithsonian American Art Museum, with the National Portrait Gallery, began evening hours on the third Thursday of each month, as part of a neighborhood program organized by the Downtown Business Improvement District (BID) to increase foot traffic in the Seventh Street Arts District. The inaugural event is a special public preview of David Beck's *L'Opéra*. Evening hours continued through December 1999.

## December 18–April 25

- *Exhibition* Artist David Beck's miniature opera house, titled *L'Opéra*, delighted crowds of visitors of all ages visiting the Smithsonian American Art Museum. Beck's intricate creation featured more than 200 hand-carved, mechanized figures performing or watching an extravagant presentation of Verdi's *Aida*.

## December 23

- *Special event* The Kansas Cosmosphere and Space Center in Hutchinson, Kansas, became an Affiliate and held a press event at the museum.

## December 31

- *Acquisition* The National Postal Museum acquires the pocket watch and fob of John Starr March, RMS *Titanic*, from John A. Corwin III.

## January

- *Service* Beginning in January, the National Museum of African Art offered a new monthly conservation clinic open to the public in which conservation staff advised visitors on the proper care of their collections.

## January

- *Appointment* Staff scientist Neal G. Smith who started his career with the Smithsonian in 1963 as biologist for the

Canal Zone Biological Area retired in 1998 and was appointed Staff Scientist Emeritus. He will continue to pursue his investigations of *Urania-Omphalea* interactions, and will advise staff, students, and visitors.

## January

- *Exhibition* The National Postal Museum opens the "Down With the Frauds!" exhibition of rare revenue stamps used to regulate adulterated foods.

## January

- *Exhibition closes* "Star Wars: The Magic of Myth" closed. Nearly a million people visited the exhibition in the year and a half it was on display at the National Air and Space Museum.

## January

- *Keynote presentations* SERC scientists gave several keynote papers at the Marine Bioinvasions Conference in Cambridge, Massachusetts.

## January

- *New media initiative* The Smithsonian American Art Museum debuted its fully redesigned Web site, which now accommodates the museum's continuing growth as a major on-line research and educational resource. More than 3,000 digital images of artworks from the permanent collection are available, as are the museum's extensive research databases, including the Inventories of American Painting and Sculpture. The site is home to an on-line art reference librarian, who handles nearly 7,000 queries about American art each year, a long-distance learning project, and 14 virtual exhibitions, including "Robert Cottingham: Eyeing America," the first time a contemporary artist and a major museum collaborated to create an on-line solo retrospective.

## January

- *Nomination* Smithsonian Folkways Recordings' *Southern Banjo Sounds* by Mike Seeger was nominated for a Grammy Award in the category of Best Traditional Folk Recording.

## January

- *Research results* New observations of supernovae shed light on the possibility that the expanding universe is accelerating in its growth, implying that there is a repulsive force component to gravity.

## January–April

- *Training (semester programs)* The Tropical Research Institute in coordination with Princeton University and McGill University, Canada, cosponsored field semester programs for biology students from both universities with Santa Maria Catholic University and the City of Knowledge, in Panama.

## January 1

■ *Event* The National Air and Space Museum's new collections information system, The Museum System (TMS), became fully operational. After rigorous testing, existing collections data were migrated into the new system, and a new decentralized method of inputting object information was adopted.

## January 2–16

■ *Workshop* The National Museum of Natural History held the first annual AMP (Alliance for Minority Participation) Scholars Winter Workshop, titled "Explore." Representing nine different AMP Centers, 12 freshman/sophomore-level students from across the United States participated in an intense two-week workshop during their winter break. The workshop was designed to give AMP students an opportunity to learn more about our collections, what natural history research is, how it is conducted, and what careers are available in the field. These students explored natural history by shadowing an NMNH research scientist, participating in their activities and learning about their career. In addition, the workshop featured special lectures, interactive discussions, hands-on demonstrations, and tours of the natural history collections.

## January 5

■ *Exhibition* The SITES exhibition "Red, Hot & Blue: A Salute to American Musicals" hit the road for a national tour. Organized as a collective biography, this retrospective on Broadway and Hollywood musicals captures the magic and dynamism musical theater created for diverse audiences over the past century. The exhibition showcases the stars, on and off stage, who gave voice and vision to the American experience over the past 100 years.

## January 13

■ *Forum* The Center for Folklife and Cultural Heritage hosted a forum for the Smithsonian Congress of Scholars on our varied involvement in cultural research as public scholarship.

## January 21

■ *Exhibit* Tropical Research Institute's exhibit "Parting the Green Curtain: the Evolution of Tropical Biology in Panama" traveled to San Jose, Costa Rica, to open at the Costa Rican National Museum.

## January 21

■ *Public program* The National Portrait Gallery presented a lecture by Edmund Morris, author of *The Rise of Theodore Roosevelt*.

## January 22

■ *Exhibition* The Archives of American Art opens the exhibition "In Sight: Portraits of Folk Artists by Chuck Rosenak" in the Gallery Space of the Archives' New York Regional Center.

## January 24

■ *Radio advertising campaign* The first radio advertisement ran in the Office of Public Affairs' Black History Month campaign, one of three radio advertising campaigns this year aimed at local African American audiences, ages 25 to 45. Another campaign was run in the spring for Spring Break and a third in the summer for the Smithsonian Folklife Festival. The following stations were used in the three campaigns in different combinations: WHUR, WMMJ, WKYS, and WPGC.

## January 25

■ *Name change* The Smithsonian Institution Board of Regents endorsed the Center for Folklife Programs and Cultural Studies name change to the Center for Folklife and Cultural Heritage.

## January 28

■ *Award* The Visitor Information and Associates' Reception Center's *Encyclopedia Smithsonian* page on the Internet received the Dow Jones Business Directory "Select Site" award for providing exceptional value to its readers.

## January 29–30

■ *Outreach/public programs* Archives of American Art staffer Liza Kirwin participates in a Smithsonian Regional Workshop Program sponsored by the SI Office of Education, "Shared Heritage: A Cultural Mosaic," in Austin, Texas, presenting a session entitled "Legends, Letters, and Lipstick Traces: Latino Holdings at the Archives of American Art."

## January 29–April 18

■ *Exhibition* "Paul Robeson: Artist and Citizen" was on view at the National Portrait Gallery. The son of an escaped slave, Phi Beta Kappa graduate of Rutgers College, brilliantly talented singer, actor, motion picture star, athlete, and political human rights activist, Paul Robeson was one of the twentieth century's most talented Americans. The exhibition, organized by Rutgers University, celebrated his life with more than 150 objects, including portraits, personal writings, and other memorabilia.

## January 31

■ *Exhibition* "Behind the Himalayas: Paintings of Mustang," an exhibition of 19 watercolors by Australian artist



and architect Robert Powell, opened at the Arthur M. Sackler Gallery.

## February

- *Award* Smithsonian Folkways Recordings' *Pete Seeger: If I Had a Hammer* was honored with a Traditional Folk Bronze Star Award in the 1998–1999 Crossroads Music Awards Program.

## February

- *New branch library* The Smithsonian Institution Libraries opened its 19th branch at the National Museum of the American Indian Cultural Resources Center in Suitland, Maryland. The branch began offering full-time library services in June when a library technician joined the Libraries. The branch has a limited collection of materials from the curatorial offices and provides interlibrary loan services.

## February

- *Public Program* OGC, in conjunction with the American Law Association–American Bar Association and the Environmental Law Institute, hosted annual environmental law seminar in Washington, D.C.

## February

- *Award* Smithsonian Libraries' Anthropology K-12 Internet Guide Named "Best" for Students. The Smithsonian Libraries published Margaret R. Dittimore's on-line guide, "Anthropology on the Internet for K-12," which was designated A Best on the World Wide Web Virtual Library's list of anthropology materials for students. The American Anthropology Association has linked the guide to its home page. Dr. Dittimore is Librarian of the Anthropology Library. Offered as part of the larger Smithsonian effort to support and advance education for diverse audiences, each section is illustrated with photographs of Smithsonian anthropologists working in the field or in their laboratories. The K-12 guide is found under Libraries Publications at <[www.sil.si.edu/](http://www.sil.si.edu/)> and is updated regularly.

## February and March

- *Research expedition* Zoologist Dr. Clyde Roper of the National Museum of Natural History led an expedition to Kaikoura Canyon, New Zealand, to find and film a live giant squid. Although the giant squid continued to elude observation, the researchers were able to document the squid's probable habitat in the deep sea, and to see and film many of its neighbors and prey species. The expedition was featured in the program "Quest for the Giant Squid" on the Discovery Channel.

## February 3

- *Public program* The Smithsonian Associates cosponsored a course with The World Bank, which included a presentation by James D. Wolfensohn, World Bank president.

## February 4

- *Exhibition and programs* "Directions—Juliò Sarmiento: Fundamental Accuracy," the first solo show in an American museum for this Portuguese artist (b. 1948), was launched at the Hirshhorn Museum and Sculpture Garden with an artist's talk about his 12 recently created, never-before-exhibited paintings and sculptures. Sarmiento, whose work was based on the eighteenth-century memoirist Giovanni Casanova, a hit of the 1997 Venice Biennale, creates pale, ideographic images of faceless women enacting ambiguous narratives which straddle tenderness and violence. Organized by Hirshhorn Assistant Director for Art and Public Programs Neal Benezra, the exhibition was generously supported by the Luso-American Development Foundation, the Calouste Gulbenkian Foundation, and the Institute for Contemporary Art, Ministry of Culture, Lisbon; Lannan Foundation; and Anthony T. Podesta, Washington, D.C.

## February 6–May 16

- *Traveling exhibition* "Faces of *TIME*: Seventy-five Years of *TIME* Magazine Cover Portraits," organized by the National Portrait Gallery, was on view at the Chicago Historical Society, Illinois.

## February 7–May 9

- *Exhibition* The National Museum of African Art presented the exhibition "Baule: African Art/Western Eyes," showcasing the outstanding artistic achievements of Baule artists from Cote d'Ivoire in West Africa.

## February 9

- *Exhibition* "Graphic Design in the Mechanical Age: Selections from the Merrill C. Berman Collection," Cooper-Hewitt, National Design Museum.

## February 9

- *Special event* The National Museum of Industrial History affiliate (Bethlehem, Pennsylvania) held a press event at the Smithsonian's Arts and Industries Building. As the "1876" gallery was being deinstalled, hundreds of artifacts were moved to Bethlehem on long-term loan.

## February 12

- *Exhibition* "Communities in a Changing Nation: The Promise of 19th-Century America," a new permanent exhibition, opens at the National Museum of American History.

The exhibition focuses on nineteenth-century industrial workers and managers in Bridgeport, Connecticut; Jewish immigrants in Cincinnati, Ohio; and slaves and free blacks in the low country of South Carolina. Dynamic panoramas, more than 200 historical artifacts, and almost 400 photographs, illustrations, graphics and personal recollections explore what the promise of America meant to the three different communities.

#### February 15

■ *Benefit* The Archives of American Art holds its longest-running annual fund-raising event, Lundi Gras XL, a gala black-tie dinner, in Detroit, Michigan, where the Archives was founded in 1954.

#### February 15

■ *Management excellence* The Board of Trustees of the Archives of American Art meets at the Cranbrook Educational Community in Bloomfield Hills, Michigan.

#### February 18

■ *Public program* The Einstein Planetarium at the National Air and Space Museum was the setting for The Smithsonian Associates' dramatic recreation of the celestial canopy above Stonehenge when that ancient structure was new.

#### February 19

■ *Medical breakthrough* Dr. Richard Montali, National Zoo pathologist, Dr. Laura Richman, and Dr. Gary Hayward, Johns Hopkins University, publish their research in *Science* documenting two new viruses believed to be responsible for the deaths of at least 10 Asian and African elephant calves in North America since 1983.

#### February 19–August 8

■ *Exhibition* "George and Martha Washington: Portraits from the Presidential Years" was on view at the National Portrait Gallery. Timed to coincide with the 200th anniversary of the death of George Washington, this exhibition presented a rare view of the first American president and first lady Martha Washington through 25 portraits made from life during Washington's years in office that included portraits by Gilbert Stuart, Charles Willson Peale, Rembrandt Peale, and John Trumbull.

#### February 22

■ *New research laboratory* The Smithsonian Institution held a dedication ceremony for a newly constructed research laboratory building for the Smithsonian Marine Station at Fort Pierce. It replaced the National Museum of Natural History's former coastal/marine field station in Florida, which had been housed in an old World War II Army barge for 27 years. The new 8,000-square-foot building is located on the

8-acre site acquired by the Smithsonian from the MacArthur Foundation. The building includes offices, individual laboratories, general-use laboratories for chemistry, histology, electron microscopy, and a wet laboratory. The new laboratory will be the first of several phases planned for the development of the 8-acre campus.

#### February 23

■ *Symposium* The Center for Folklife and Cultural Heritage and Children's Television Workshop cosponsored a symposium that examined the 30-year history of diversity and multicultural programming on *Sesame Street*, the longest-running television series in the world.

#### February 25

■ *Reinstallation* After an extensive five-month renovation of its third floor, the Hirshhorn Museum and Sculpture Garden ushered in its 25th-anniversary year by opening "The Hirshhorn Collection at 25: Celebrating Modern Art," the first phase of a major reinstallation of its holdings. Assistant Director for Art and Public Programs Neal Benezra and curators Judith Zilczer and Valerie Fletcher conceived and carried out the rehanging in reconfigured spaces replete with new carpeting and lighting. *Washington Post* critic Jo Ann Lewis praised the "provocative groupings" in this "vital and respected national museum of modern art." Further marking the anniversary were an open house and director's lecture (April 25), a redesigned museum calendar (Winter 1999 issue), outdoor banners, and a month-long documentary exhibition ("Faces of Friendship," April 7–May 9) recounting Joseph Hirshhorn's patronage in archival, inscribed photographs donated by his widow, Olga Hirshhorn.

#### March

■ *Acquisition* Patricia Smith Melton presented a collection of 34 rare American appliquéd, pieced, and whole cloth quilts made before 1850 to the Smithsonian American Art Museum's Renwick Gallery.

#### March

■ *Award* The Smithsonian American Art Museum was awarded "Best Research Site" at the 1999 Museums and the Web conference held in New Orleans. The depth of research information, a testament to the museum's long tradition in developing research resources, was among the criteria considered by the judges.

#### March

■ *Award* The Smithsonian American Art Museum was given the Smithsonian Institution's 1999 Exhibition Award for Best Design and Installation for the exhibition "Daniel Brush: Gold without Boundaries," on view at the Renwick Gallery in fall 1998.

## March

- *Exhibition* The National Postal Museum sends the traveling exhibit “Posted Aboard RMS *Titanic*” to Melbourne, Australia, as part of March 1999 international philatelic event, “Melbourne 99.”

## March

- *Program milestone* The 6.5-meter glass primary mirror for the MMT telescope at the Fred L. Whipple Observatory on Mt. Hopkins, Arizona, is installed in its holder.

## March

- *Public program* OGC in conjunction with the American Law Association-American Bar Association hosted the annual seminar in Chicago (Legal Problems in Museum Administration Conference).

## March

- *Research grant* The Smithsonian American Art Museum signed an inter-agency agreement with the National Endowment for the Arts that will provide \$430,000 over the next two years for the museum to digitize 50,000 slides of works by 5,000 artists who received grants from the Arts Endowment’s Visual Artists Fellowship Program from 1967 to 1995. The NEA Artists Archives will be hosted on the museum’s Web site as part of its on-line study center.

## March

- *Workshop* Organized by the Association of Vietnamese Folklorists and the Institute of Musicology and sponsored by the Center for Folklife and Cultural Heritage, this workshop, first in a series, taught researchers about audio documentation of the traditional music of the Kinh (Viet) majority and of several ethnic minorities.

## March 1

- *Public program* World-renowned scientist Richard Dawkins came to the Smithsonian from Oxford University to reflect on the most compelling topics in science today in a program produced by the The Smithsonian Associates.

## March 2

- *Imaging Center opens* The Smithsonian Libraries opened a digital Imaging Center where Libraries’ staff produce digital editions of rare books, which are published on-line and available worldwide on the Internet while safeguarding the Smithsonian Libraries’ collection for future generations by reducing the amount of handling of fragile materials. The Imaging Center is a production unit where printed materials are scanned, casting images and text from paper-based materials into a digital format. With start-up funding from the Smithsonian’s Atherton Seidell Endowment Fund and the

Jaques Admiralty Law Firm of Detroit, Michigan, the Imaging Center is headed by the Information Systems Division and overseen by the Preservation Services Department.

## March 11

- *Public program* “NCIIA Exhibition” sponsored by the National Museum of American History’s Lemelson Center. An exposition of inventions by college students from around the country. The National Collegiate Inventors and Innovators Alliance Exposition will feature the most innovative and commercially promising prototypes of new inventions created by 12 teams of college students.

## March 11

- *Public program* *TIME* magazine correspondent Ann Blackman lectured on her book, *Seasons of Her Life: A Biography of Madeleine Korbel Albright*, at the National Portrait Gallery.

## March 13

- *Exhibition* SITES opened the exhibition “To Honor and Comfort: Native Quilting Traditions” from the National Museum of the American Indian and Michigan State University Museum. The exhibition celebrates quilting within diverse American Indian and Native Hawaiian communities and pays tribute to the artists who have expressed their cultural heritage through these spectacular textiles.

## March 18

- *Donation* Three puppets from the play “Lewis Latimer: Renaissance Man” will become part of the National Museum of American History’s Division of Cultural History Collection. They were featured in a play presented by the Lemelson Center.

## March 18

- *Lecture* Scientist Stephen Jay Gould lectured for The Smithsonian Associates on why he believes the science-religion conflict is false.

## March 19–July 4

- *Traveling exhibition* “Teddy Roosevelt: Icon of the American Century,” an exhibition co-organized by the National Portrait Gallery and the National Park Service, U.S. Department of the Interior, was on view at Federal Hall National Historic Site, New York City.

## March 19–July 25

- *Exhibition* The Smithsonian American Art Museum’s Renwick Gallery hosted two spring exhibitions. “Dominic Di Mare: A Retrospective” featured the delicate but powerful fiber sculptures by this California artist. The Renwick

Gallery was the exclusive East Coast venue for the exhibition. "Shaker: Furnishings for the Simple Life" examined the furniture and decorative arts from Mount Lebanon, the first and most prominent Shaker community.

### March 20

■ *Exhibition* Organized by the Center for Folklife and Cultural Heritage and the Smithsonian Institution Traveling Exhibition Service, the exhibition "Creativity and Resistance: The Maroon Cultures of the Americas" opened at the National Civil Rights Museum in Memphis, Tennessee, and continues on a two-year tour. It focuses on the history and present-day cultures of the Ndjuka, Saramaka, and Aluku peoples of the Guianas; the Seminole Maroons of Texas and Mexico; and the Leeward and Windward Maroons of Jamaica.

### March 20, 21, and 28

■ *Artist demonstration* Nigerian contemporary artist Sokari Douglas Camp demonstrated to teachers how to create sculptures from ordinary materials and spoke about her art in a public gallery discussion, both held at the National Museum of African Art.

### March 21–June 20

■ *Exhibition* "Sokari Douglas Camp: Church Ede, A Tribute to Her Father," presented in the National Museum of African Art's intimate Point of View Gallery, gave visitors the opportunity to view the contemporary Nigerian artist's monumental kinetic sculpture created as a tribute to her father.

### March 23

■ *Award* The Archives of American Art receives a gift of \$50,000 in honor of Archives' Trustee Barbara G. Fleischman from Agnes Gund, former president of the board of the Museum of Modern Art, New York.

### March 27

■ *Exhibition* The SITES exhibition "Americanos: Latino Life in the United States" opened at the National Museum of American History. The exhibition is cosponsored with the Smithsonian Center for Latino Initiatives. The bilingual exhibition, the brainchild of actor and activist Edward James Olmos, presents an intimate portrait of the Latino community through the work of prize-winning Latino photographers. The exhibition is the centerpiece of a larger educational effort that includes a Home Box Office documentary special, a Time Warner Music CD, and a book published by Little, Brown. "Americanos," a project of Olmos Productions, is made possible through the generous support of AOL Time Warner and US WEST. Additional support is provided by Farmers Insurance.

### March 27–October 10

■ *Exhibition* "Santo Pinhole: A Saint for Photography" showcase opened at the National Museum of American History. This tribute to Ansel Adams by New Mexican Artist Elizabeth Kay. By depicting Adams as a saint, or "santo" the artist challenges the viewer to examine the legacy of the photographer's work on American art and culture.

### March 28

■ *Exhibition* "Devi: The Great Goddess," an exhibition of 120 works primarily from India, with a few examples from Nepal, China, and Pakistan, was on view in the Arthur M. Sackler Gallery through September 6, 1999. The sculptures in bronze, stone, and terra cotta and paintings on paper, textile, and board ranged in style over 2,000 years. On the opening day of the Arthur M. Sackler Gallery exhibition, "Devi: The Great Goddess," the Vedic chant ensemble of the Sri Siva Vishnu Temple, the devotional song ensemble of the Durga Temple and dancer Mallika Sarabhai performed throughout the day. Young people and their adult companions joined in continuous sessions of the popular ImaginAsia program by visiting the exhibition and then creating a rice-flour diagram for the goddess.

### March 28–May 30

■ *Traveling exhibition* "Philippe Halsman: A Retrospective," an exhibition organized by the National Portrait Gallery, was on view at the Center for Creative Photography, University of Arizona, Tucson.

### March 29–April 18

■ *Exhibition, special event* The National Music Museum affiliate in Washington, D.C., celebrated the Duke Ellington anniversary by hosting SITES' "Beyond Category" exhibition at Union Station and arranging a series of performances.

### April

■ *Acquisition* Smithsonian Folkways Recordings acquired Monitor Recordings, comprised mostly of music from the Soviet Union, the Eastern Bloc, and other parts of Europe. Begun in 1956, Monitor has more than 250 folk and classical music recordings in its catalogue.

### April

■ *Curriculum development* The National Science Resources Center focussed much of its curriculum development efforts on the development of Science and Technology Concepts for Middle Schools (STC/MS), a comprehensive science and technology curriculum for grades 7 and 8. The four STC/MS modules under development—*Human Body Systems*, *Properties of Matter*, *Catastrophic Events*, and *Energy, Machines, and Motion*—underwent field testing during this past year. Completion of the field testing during the spring semester

was a major milestone. Through direct interactions with the students and teachers, the NSRC curriculum developers obtained insights about students' reaction to the module activities that were invaluable to the development process. By then meeting with advisory committees to review the feedback, the NSRC ensured that the recommended changes would also continue to comply with the National Science Education Standards. The developers continue to work with technical advisors to conduct final reviews of the lessons for scientific accuracy and pedagogical appropriateness as modules are readied for commercial publication.

#### April

- *Exhibition* "Nuestras Voces en Washington, D.C.," an exhibition that is part of the Latino Community Heritage Center, opened after long collaborations between the Latin American Youth Center, the Center for Folklife and Cultural Heritage, and the Historical Society of Washington, D.C.

#### April

- *New building* Completion of Phase IV of the expansion of SERC's C.M. Mathias Laboratory building.

#### April

- *Partnership* The Smithsonian American Art Museum signed an agreement with the Principal Financial Group, headquartered in Des Moines, Iowa, for a National Visibility Partnership in conjunction with the museum's upcoming tour called "Treasures to Go," eight nationally circulating exhibitions based on the museum's permanent collection. The \$3.75 million will go toward producing a series of national cable television specials, a syndicated program for broadcast on a network affiliate in each city visited by the tour, public relations, advertising, and media partnerships with national publications. The "Treasures to Go" tour begins January 7, 2000.

#### April

- *Research* Dr. Tim McCoy, Associate Curator in the Department of Mineral Sciences at the National Museum of Natural History, published findings from his research on the Martian meteorite Zagami. McCoy has been studying how lava flows on the surface of Mars by studying the meteorite. He has recognized that Zagami contains different layers that record a lava flow being emplaced on the surface of Mars and then fractionating during its long cooling history. The presence of different rock layers in this rock, one of only 13 meteorites known to come from Mars, suggests that this may be a common process and future Mars explorers (robots and humans) might encounter such diversity.

#### April

- *Research results* SAO astronomers studying galaxies in their X-ray light find additional evidence supporting the

theory that the centers of galaxies (including our own Milky Way) contain black holes with as much mass as a billion suns.

#### April 2–August 22

- *Exhibition* "Picturing Old New England: Image and Memory," a ground-breaking exhibition organized by the Smithsonian American Art Museum, grouped masterworks and images from popular culture to explore, for the first time, the ways in which New England was depicted in American art from 1865 to 1945, and how New England subjects addressed broader cultural currents in the country.

#### April 5

- *Donation and award* Announcement of a \$2.5 million gift to found the Ikuo Hirayama Program for Conservation of Japanese Painting at the Freer Gallery of Art and Arthur M. Sackler Gallery. Hirayama, president of the Japan Art Institute, Tokyo, was also inducted into the Order of James Smithson for his contributions totaling \$11 million to the Freer and Sackler galleries.

#### April 5

- *Easter Monday* The National Zoo's Easter Monday planning committee again hosts a day of festive activities for a long-standing community gathering at the National Zoo.

#### April 6–9

- *Professional institute* The Smithsonian Associates' National Outreach program presented a World Affairs Institute for Indiana University entitled "Southeast Asia: Winds of Change." Participants represented state leaders in education, business, politics, and economics.

#### April 6, June 24–25, July 8–9

- *Strategic planning meetings* The Program for Asian Pacific American Studies organized three meetings involving Asian Pacific American scholars, civic leaders, and arts organizations to inform the Program's strategic planning process.

#### April 8

- *Agreement* The Tropical Research Institute signed the Biological Prospecting Agreement with the Panamanian Authority for the Environment (ANAM) to initiate a program designed to link conservation of Panamanian biodiversity with bioprospecting for novel products for medicine and agriculture, for five renewable years. Funding for the project was provided by the National Institutes of Health through the International Cooperative Biodiversity Groups program (ICBG).

#### April 8

- *Leasing contract* The Tropical Research Institute signed a five-year renewable contract with the Panamanian Authority

for the Interoceanic Region (ARI) for the lease of sites in Gamboa to develop a center for research and education, a laboratory and apartments for scientists, students, and visiting scholars.

#### April 9

▪ *Public program* The National Museum of American History's Lemelson Center presents "From Sailboards to Windsurfing: Inventing a Sport," an Innovative Lives program featuring Newman Darby, inventor of the sailboard.

#### April 13

▪ *Acquisition* The National Postal Museum acquires the first adhesive postage stamp (1831 Greek 40-lepta charity tax or postage issue due) on 1848 cover from Matthew Bennett Inc.

#### April 16–September 6

▪ *Exhibition* "Franklin & His Friends: Portraying the Man of Science in Eighteenth-Century America," was on view at the National Portrait Gallery. Franklin and his fellow men of science shared their work with like-minded colleagues in America and Europe through correspondence, membership in philosophical societies, and commissioned portraits that featured the accoutrements of their avocations. This exhibition examined the eighteenth-century fascination with science and the "man of science" as an ideal figure through portraits, botanical drawings, rare books, microscopes, telescopes, and electrical machines.

#### April 19

▪ *Exhibition* The photographic exhibition "Frozen in Time: The Iceman" opened at the National Museum of Natural History. It tells the story of a 5,300-year-old mummy discovered frozen in an Alpine glacier and shows how scientists are reconstructing his way of life.

#### April 19–23

▪ *International conference* The 10th International Conference on Modern Trends in Activation Analysis, organized by the National Institute for Standards and Technology (NIST) and cosponsored by the Smithsonian Center for Materials Research and Education, was held in Bethesda on the campus of the National Institutes of Health. SCMRE and NIST are partners in a longtime collaborative program applying neutron activation analysis in archaeological research.

#### April 19–May 28

▪ *Training* The Tropical Research Institute cosponsored a six-week intensive guide training course with the local tourism industry and the U.S. Agency for International Development, in response to Panama's Tourism, Conservation, and Research Action Plan, designed to develop a sustainable tourism in Panama.

#### April 20

▪ *Event* The Annual Appreciation Reception for Visitor Information and Associates' Reception Center's Corps of Behind-the-Scenes Volunteers included remarks by Smithsonian Secretary I. Michael Heyman.

#### April 22

▪ *Board of Trustees* The Board of Trustees of the Hirshhorn Museum and Sculpture Garden held its second meeting of the year, welcoming J. Tomilson Hill of New York City, who was elected at the previous meeting. Two months later, John Pappajohn of Des Moines, Iowa, was elected by mail ballot as the eleventh member of the board. Founded in 1971 with 10 general members, the Hirshhorn Board, following congressional approval, was authorized by the Smithsonian Regents to begin a gradual expansion to 25 members. Also this year, the Board mourned the deaths of two longtime, dedicated members of the Board. Founder of Best Products, Sydney Lewis of Richmond, Virginia, served as Chairman from 1985 to 1991. Jerome Greene, an attorney and philanthropist from New York City, served as Chairman from 1991 to 1997. Both gentlemen began their valued association with the Hirshhorn in the 1970s.

#### April 23–September 6

▪ *Exhibition* The Smithsonian American Art Museum organized a retrospective of Abbott Handerson Thayer's work to celebrate the 150th anniversary of the birth of this influential Gilded Age artist. "Abbott Thayer: The Nature of Art" featured his portraits, ideal figures, landscapes, and studies of natural camouflage. The museum's New Media staff and the exhibition curator created a virtual exhibition, available on the museum's Web site. Tipper Gore, wife of Vice President Al Gore, was the Honorary Patron for this exhibition.

#### April 25

▪ *Exhibition* "Nainsukh: Painter from the Punjab Hills," an exhibition of 31 paintings by an innovative eighteenth-century artist of northwestern India opened at the Arthur M. Sackler Gallery.

#### April 26–30

▪ *International workshop* The second workshop as part of a Coordinated Research Project on "Nuclear Analytical Techniques in Archaeological Investigations" was held in Cuzco, Peru. Funded by the International Atomic Energy Agency and coordinated by the Smithsonian Center for Materials Research and Education, the workshop brought together teams of nuclear scientists and archaeologists from Argentina, Brazil, Chile, Cuba, Mexico, and Peru in a program to develop nuclear resources for archaeologists in Latin America. Workshop content and research guidance in problem design, analytical standardization, and data interpretation was pro-

vided by SCMRE faculty. A final meeting for SCMRE staff to review completed research and statistical presentation prior to technical publication of the workshop proceedings was scheduled for November 2000 in Chile.

#### April 27

- *Exhibition* “The Huguenot Legacy: English Silver 1680–1760,” Cooper-Hewitt, National Design Museum.

#### April 29

- *Public program* The National Museum of American History’s Smithsonian Jazz Masterworks Orchestra presented a concert featuring Duke Ellington’s sacred music.

#### April 30

- *Exhibition* “Ainu: Spirit of a Northern People,” a temporary exhibition celebrating the 10,000-year-old culture of the indigenous people of Japan, opened at the National Museum of Natural History. It included more than 200 objects, such as art, jewelry, and a full-size reproduction of a *chisé*, the home and center of Ainu life.

#### April 30

- *Programs* To expand educational offerings for older audiences at the Hirshhorn Museum and Sculpture Garden, a new series titled “Art Explorers Workshops for Adults” was launched with a tour and discussion focused on the function, history, and craftsmanship of frames. Education initiatives continued to expand in June with the start of daily summer tours of the Sculpture Garden and in September with the new monthly “Improv Art” drop-in activity room for families on Saturday mornings. Also in September the Hirshhorn’s well-regarded film series began its fall series with *Two Minutes Silence, Please*, a documentary from Holland.

#### May

- *Award* Smithsonian Folkways Recordings’ *The Harry Smith Connection* received an INDIE award in the category of Americana Music.

#### May

- *Awards* The Libraries Web page at [www.sil.si.edu](http://www.sil.si.edu) is home to “Library and Archival Exhibitions on the Web,” a site with links to approximately 600 on-line exhibitions created by or related to libraries, archives, and historical societies. The site, which is maintained by Diane Shaw of Libraries staff, received four national awards and was named the *USA Today* Hot Site in June.

#### May

- *Exhibition* The National Postal Museum sends the traveling exhibit “Posted Aboard RMS *Titanic*” to the National

Postal Forum, San Antonio, Texas, in conjunction with the American Postal Workers Union.

#### May

- *Final design* The final design drawing details and technical specifications for the National Air and Space Museum’s Dulles Center were delivered by architects Hellmuth, Obata, and Kassabaum (HOK). Smithsonian and HOK staff continue follow-on design tasks, such as donor recognition detailing and lighting design.

#### May

- *Management excellence* In anticipation of the renovation of the Old Patent Office Building, where the Archives was previously located, and the Archives’ eventual relocation to permanent offices in the newly acquired Victor Building, the Archives of American Art moves into temporary offices in The Aerospace Center in Washington, D.C.

#### May

- *New building* Completion of SERC’s new Storage Building.

#### May

- *New dock* Completion and opening of SERC’s new dock on the Rhode River.

#### May

- *Exhibition* Official opening of the “Tales of the Blue Crab” traveling exhibition designed at SERC to provide school children scientific information on the morphology, life cycle, and habitat requirements of this important fishery species. The exhibition will tour regionally.

#### May

- *New wing* Featuring the state-of-the-art Samuel C. Johnson Theater, the Atrium Café, and Museum Shops, the Discovery Center opened at the National Museum of Natural History. The Theater is the only one in Washington, D.C., to show both 3-D and 2-D large-format films.

#### May

- *Nomination* Smithsonian Folkways Recordings’ *Dock Boggs: His Folkways Years 1963–1968* was nominated for Historical Album at the INDIE awards in Atlanta.

#### May

- *On-line publication* The Archives of American Art makes available on its Web site “A Preliminary Guide to Resources on Asian American Artists at the Archives of American Art.”

## May

- *Open house* SERC's annual open house for visits by citizens of the region.

## May

- *Publication* Smithsonian Directive SD 600: Collections Management Policy was coordinated by the National Collections Program, Smithsonian Institution Archives.

## May

- *Workshop* Organized by the Vietnam Museum of Ethnology and sponsored by the Center for Folklife and Cultural Heritage, this second workshop taught methods of folklore photodocumentation and exhibition.

## May 1

- *Exhibition* The National Postal Museum selects 75 winners of the annual Graceful Envelope Contest. The winning entries are displayed at the museum.

## May 3

- *Public program* The Smithsonian Associates, in collaboration with the Kentucky Derby Museum, presented an amazing list of owners, trainers, and riders of past Derby winners in an evening of reminiscing about the world's most famous horse race.

## May 7

- *Exhibition opening* "A Closer Look at Santos/*Una Mirada mas Profunda a los Santos*," a small exhibit organized by the Smithsonian Center for Materials Research and Education, opened at the de Saisset Museum of Santa Clara University in Santa Clara, California. The exhibit centered on the technical examination of *santos*, polychrome wood objects of veneration, that represent a long and still very much alive tradition in Latino culture. This exhibit presented findings relating to artists' materials and techniques on four historical objects—two from the collections of the National Museum of American History and two from the de Saisset Museum.

## May 7

- *Symposium* "Pomo Indian Basket Makers: Past, Present and Future" at NMAI, George Gustav Heye Center, New York City explored a wide range of topics connected to Pomo basketry and basket making.

## May 8

- *Acquisition concert* The 17th anniversary of the monthly audio compilation magazine, "The Fast Folk Musical Magazine," and the transfer of its master recordings, artwork, and

other archival materials to Smithsonian Folkways were celebrated with a concert at the Bottom Line in New York.

## May 8

- *Public program* The Smithsonian Associates filled Baird Auditorium for a seminar that brought together one of the largest groups of former Presidential Press Secretaries ever assembled.

## May 9–August 15

- *Exhibition* "Pomo Indian Basket Weavers: Their Baskets and the Art Market," consisting of 125 Pomo baskets and 100 historical photos, examined the effects of the art market upon the lives of 50 Pomo women, their families, communities and basketry during the period of 1900 to 1915. Held at NMAI George Gustav Heye Center, New York City and organized by the University Museum, University of Pennsylvania.

## May 13–14

- *Public program* The National Museum of American History presented "Disability and the Practice of Public History," an interdisciplinary conference for disability scholars, public history and museum professionals, exhibit developers and activists on integrating idea about people with disabilities into history content, beyond issues of access.

## May 14

- *Exhibition* "The Window Show," Cooper-Hewitt, National Design Museum.

## May 16

- *Community workshop* This free, all-day workshop at the Lake Sonoma Visitor Center in Geyserville, California, was aimed at introducing Pomoan participants to the center and its willow patches and sedge beds, which are available for gathering by Pomoan basket makers. The community workshop was cosponsored by the National Museum of the American Indian, the Dry Creek Rancheria, and the U.S. Army Corps of Engineers.

## May 18

- *Public program* Artist Al Hirschfeld, at age 95, came to the Smithsonian to delight the audience in an Smithsonian Associates-sponsored interview with Frank Rich, former chief drama critic for the *New York Times*.

## May 20

- *Exhibition* The Archives of American Art opens the exhibition "Eyre de Lanux: Designs of a Muse" in the Gallery Space of the Archives' New York Regional Center.



## May 20

- *Public program* Panel discussion “Witness: Japanese and Jewish Americans in WWII.”

## May 20

- *Public program* The Smithsonian American Art Museum, as part of the “Third Thursday” evening hours program highlighting cultural events in the Seventh Street Arts District, hosted a poetry reading of new work inspired by the museum’s exhibition “Picturing Old New England: Image and Memory” by 10 area poets.

## May 21

- *Lecture* Charles Brownell delivered the 1999 Dibner Library Lecture. His slide presentation, “Horrors! Changing Perspectives of American Victorian Homes,” featured classic Victorian residential architecture and what it symbolized in literature, film, and popular culture, and entertained an appreciative audience of curators, historians, architectural students, and Victorian hobbyists. The lecture was supported by The Dibner Fund.

## May 22–November 30

- *Exhibition* “From Bento to Mixed Plate: Americans of Japanese Ancestry in Multicultural Hawaii”—The Program for Asian Pacific American Studies hosted this traveling exhibition from the Japanese American National Museum in the Arts and Industries Building. More than 100 volunteers worked more than 1,400 hours as gallery guides for the exhibition. More than 700 people participated in related public programs, including demonstrations of raku pottery, origami, and traditional Hawaiian crafts.

## May 23–January 9

- *Exhibition* “Pueblo Portraits: 50 Years at Laguna Pueblo”—An exhibition of 40 black-and-white photographs that chronicle photographer Lee Marmon’s diverse career that has spanned over half a century. The photos present an intimate and personal view of Marmon’s pueblo community in northern New Mexico.

## May 24

- *Public program* The Smithsonian Associates’ collaborations with Smithsonian museums on cultural and educational programs highlighted the extraordinary Janet Annenberg Hooker Hall of Geology, Gems, and Minerals, NMNH, and presented curator Jeffrey Post to an overflow audience.

## May 25

- *Management excellence* The Board of Trustees of the Archives of American Art meets at the National Academy of Design in New York City.

## May 25

- *Management excellence* The Board of Trustees of the Archives of American Art elects as President of the Board Barbara Fleischman, widow of Lawrence Fleischman, one of the founders of the Archives in 1954.

## May 27

- *Exhibition and programs* “Brice Marden, Work of the 1990s: Paintings, Drawings, and Prints,” an exhibition highlighting a decade of increasingly animated and colorful abstractions by this widely respected American painter (b. 1938), opened at the Hirshhorn Museum and Sculpture Garden, continuing through September 6. Organizing curator Charles Wylie of the Dallas Museum of Art, where the show originated, delivered a slide-illustrated lecture probing Marden’s response to Chinese calligraphy, the light and mythology of Mediterranean culture, and the dynamic power of line pioneered by such earlier artists as Abstract Expressionist Jackson Pollock, with whom he is often compared. For its East Coast premiere at the Hirshhorn, the exhibition, which traveled subsequently to the Miami Art Museum and the Carnegie Museum of Art in Pittsburgh, generated gallery presentations, documentary films, and a children’s workshop called “What’s My Line?”

## May 27

- *Exhibition* Exhibition on Margaret Mee opens in Amazonia Science Gallery at the National Zoo. Sir Ghillean Prance, director of Royal Botanic Garden at Kew, presents lecture, “An Intricate Dependency: Animals and Plants in the Amazonian Ecosystem,” to NZP audience.

## May 28

- *Exhibition* The Star-Spangled Banner conservation laboratory and exhibition opens at National Museum of American History. “Preserving the Star-Spangled Banner: The Flag that Inspired the National Anthem” provides a look at the conservation process and story of the flag. Visitors will be able to follow the progress of the historic conservation of the Star-Spangled Banner. For much of the three-year preservation project, the public will be able to see the banner housed inside its glass-and-chrome conservation laboratory through floor-to-ceiling windows. The customized laboratory will provide the public with its closest look at the flag.

## May 28–August

- *Exhibition* The traveling exhibition, “Margaret Mee: Return to the Amazon,” co-organized by the Royal Botanic Gardens, Kew, and the Houston Museum of Natural Science, opened at the National Museum of Natural History. It documented the life and work of Margaret Mee (1909–1988), and bridged the worlds of art and natural science while confronting the global issues of rainforest destruction and

preservation. The exhibition was further supplemented by a lecture organized by the Department of Botany with Sir Ghillean Prance, Director of Royal Botanic Gardens, Kew.

## June

- *Award* The Archives of American Art submits final report of the Latino Pool Allocation Fund for FY 1999, detailing the completion of the Puerto Rican Art Documentation Project, as well as the completion of the processing of papers and oral history interviews for a Chicano art documentation project in San Francisco and Los Angeles.

## June

- *Discovery decks* During fiscal year 1999 the National Science Resources Center completed the development and publication of its elementary curriculum, Science and Technology for Children (STC), by publishing the last Discovery Decks. Discovery Decks are sets of imaginatively illustrated resource cards that expand on the major topics of the fourth-through sixth-grade STC units. Each Discovery Deck includes about 30 cards that focus on a set of closely related topics and that provide historical accounts of scientific discoveries, interviews with scientists, and investigations students can do themselves. Discovery Decks are now included in all STC kits for grades 4 through 6. The publication of the final four Discovery Decks—*Motion and Design*, *Animal Studies*, *The Technology of Paper*, and *Ecosystems*—showcases some special partnerships that the NSRC established during their development. For example, the Technical Association of the Pulp and Paper Industry supported the development of *The Technology of Paper* Discovery Deck. The completion of these Discovery Decks brought to a close the NSRC's STC elementary curriculum project.

## June

- *Exhibition* The National Postal Museum installs "Posted Aboard RMS *Titanic*" in the Postmaster's Gallery, The Australia Post, Melbourne, Australia.

## June

- *Exhibition* Two temporary exhibits were added to the National Air and Space Museum's Space Race gallery. "The Soviet Challenge in Space: Illustrating the Threat" is a display of 12 paintings created for the Defense Intelligence Agency to illustrate Soviet weapons systems and advanced technology during the Cold War. The other exhibit is on the Faint Object Spectrograph from the Hubble Space Telescope.

## June

- *Rare book purchased* Guido Guidi's *Chirurgia P Graeco in Latinum Conversa* (Paris, 1644) was purchased by the Smithsonian Libraries with funds provided by the Smithsonian

National Board Annual Giving Fund and the Office of the Provost. This exquisitely illustrated, very rare folio has visual and descriptive text valuable to the study of the early medical arts.

## June and September

- *Archives acquisitions* The National Museum of African Art's Eliot Elisofon Photographic Archives acquired three important collections: The Kyriazis Photographic Collection of images of activities and places in Ethiopia taken from 1950–1970, The Robert and Nancy Nooter Ethiopian Collection of images of activities and places in Ethiopia taken in 1988, and The Leon de Sousberghe Collection of images of the Pende peoples in the Democratic Republic of the Congo, taken in 1955–1957.

## June–December

- *Conservation* Four large cast concrete screens by Nigerian artist Adebisi Akanj, donated to the National Museum of African Art in 1994 by Mr. and Mrs. Waldemar A. Nielsen, were restored by the museum's conservation department. The screens will be featured in an exhibition on several artists from the important Oshogbo art movement in southwestern Nigeria.

## June 2

- *Panda illness* The National Zoo's giant panda, Hsing-Hsing, experienced a severe deterioration in his health. He develops kidney dysfunction in June.

## June 3

- *Summer program* "Latin Music on the Plaza," a 12-week evening concert series presented outdoors by the Hirshhorn Museum and Sculpture Garden, was launched with contemporary music inspired by Latin American poetry. The free series, a central component of the Hirshhorn's programming to accompany extended Thursday hours for the Smithsonian's "Art Night on the Mall," continued with a variety of Caribbean and Central and South American musical performances that attracted an estimated 8,300 visitors to the Plaza. Meanwhile, a program of independent films and gallery talks by artists and curators brought these visitors inside the museum to explore exhibitions.

## June 3–September 2

- *Summer hours* The National Museum of African Art's extended summer hours drew hundreds of visitors on Thursday nights as part of Art Night on the Mall. Youngsters made colorful hats and then showed them off as they paraded to the exhibition "Hats Off: A Salute to African Headwear," while art lovers had the opportunity to talk with South African artist Rudzani Nemasetoni. In addition, the mu-

seum's entrance pavilion filled with the sounds of musicians from Cameroon and South Africa.

### June 5

- *Exhibition* Three paintings depicting heroic winged figures by the American artist Abbott Handerson Thayer (1849–1921) were on view in “Thayer's Winged Figures” at the Freer Gallery of Art through February 19, 2000.

### June 8–14

- *Study tour* Smithsonian Study Tours, a division of The Smithsonian Associates, offered a first-time program featuring gala performances and special behind-the-scenes tours at the Spolero, USA Festival in Charleston, South Carolina.

### June 10–11

- *Meeting* The International Cooperative Biodiversity Group held its first annual meeting on the Ecologically Guided Bio-prospecting Project in Panama at the Earl S. Tupper Research and Conference Center, Barro Colorado Island, the University of Panama, and Gorgas Memorial Laboratories.

### June 14

- *Management excellence* The Archives of American Art appoints Nora Maroulis as its first Assistant Director, Membership and Development.

### June 18

- *Public program* Reception and screening of documentary film “Rabbit in the Moon” about internment of Japanese Americans during World War II. Cosponsored by Freer/Sackler and National Asian American Telecommunication Association (NAATA).

### June 18

- *Transfer* The National Postal Museum receives two gold U.S. postal inspector badges from the U.S. Postal Inspection Service.

### June 18–January 9

- *Exhibition* “Picturing Hemingway: A Writer in His Time” was on view at the National Portrait Gallery. Hemingway has been called the single most influential American writer of the twentieth century, and in his own day he achieved an unmatched literary and popular celebrity. This exhibition marks the 100th anniversary of his birth with photographs, paintings, letters, first editions, manuscripts, and personal memorabilia.

### June 19–September 7

- *Traveling exhibition* “Faces of TIME: Seventy-five Years of TIME Magazine Cover Portraits,” organized by the National

Portrait Gallery, was on view at the Jimmy Carter Presidential Library in Atlanta, Georgia.

### June 20–September 26

- *Exhibition* The National Museum of African Art's Sylvia H. Williams Gallery was the location of “Claiming Art/ Reclaiming Space: Post-Apartheid Art from South Africa.” The exhibition included a 23-foot-long collage, as well as paintings, prints, multimedia assemblages, videotapes, and an interactive artist's book. A South African film series that accompanied the exhibition attracted standing-room-only audiences.

### June 22–September 5

- *Traveling exhibition* “Andy Warhol's Flash—November 22, 1963,” an exhibition organized by the National Portrait Gallery, was on view at the Delaware Art Museum.

### June 23

- *Opening ceremony* The Smithsonian Folklife Festival, produced by the Center for Folklife and Cultural Heritage, opened with distinguished speakers representing the three major programs, including Governor Shaheen of New Hampshire; Honorable James Rosapepe, U.S. Ambassador to the Republic of Romania; and Her Excellency Sheila Sisulu, U.S. Ambassador to the Republic of South Africa.

### June 23–27

- *Seminar* The Center for Folklife and Cultural Heritage held its sixth annual seminar for teachers, “Bringing Folklife into the Classroom.” The teacher seminar drew upon the Smithsonian Folklife Festival as a “living laboratory” for using multicultural resources and folklife techniques in the K–12 classroom.

### June 23–27, June 30–July 4

- *Exhibition* The Center for Folklife and Cultural Heritage produced the 33rd annual Smithsonian Folklife Festival featuring programs on New Hampshire, Romania, and South Africa.

### June 23–27, June 30–July 4

- *Folklife Festival* The Office of Public Affairs developed a local and national publicity campaign for the 33rd annual Smithsonian Folklife Festival, which featured three different programs—“Celebrating New Hampshire's Stories,” “Gateways to Romania,” and “South Africa: Crafting the Economic Renaissance of the Rainbow Nation.” Media coverage included network and local morning shows, a number of articles in the *Washington Post*, and coverage in the *New York Times*, *USA Today*, and *Washingtonian* magazine.

## June 24

■ *Concert* The Center for Folklife and Cultural Heritage held the fifth annual Friends of the Festival Ralph Rinzler Memorial Concert, featuring two bands from recent immigrant groups. The Yuri Yanakov Band performs music from Bulgaria and the Republic of Macedonia, and Ensemble Tereza presented Mountain Jewish music.

## June 24

■ *Exhibition* The SITES exhibition "This Land is Your Land: The Life and Legacy of Woody Guthrie," the first comprehensive exhibition about the revered musician and artist, opened to stellar reviews at the Autry Museum of Western Heritage in Los Angeles.

## June 24

■ *Purchase agreement* The Office of Contracting negotiated an agreement with The John Akridge Company to purchase the Victor Building at 9th and H Streets, NW.

## June 25

■ *Publication* Conrad Labandeira and Peter Wilf of the National Museum of Natural History's Paleobiology Department authored a report "Response of Plant-Insect Associations to Paleocene-Eocene Warming" that appeared in the journal *Science*. They studied insect damage on fossil plants during a time that is associated with the greatest rise in global temperatures during the past 65 million years. Their research demonstrated that insect herbivores responded by increased levels of herbivory and in the variety of damage types on host-plant species.

## June 25–July 3

■ *Panda acquisition discussions* A National Zoo team visits China to discuss the possibility of acquiring pandas.

## June 27–30

■ *Conference* The Center for Folklife and Cultural Heritage cohosted with UNESCO a working conference, "A Global Assessment of the 1989 Recommendation on the Safeguarding of Traditional Culture and Folklore: Local Empowerment and International Cooperation." The conference brought together international scholars and institutional directors from 24 nations who have participated in regional UNESCO conferences leading up to this meeting.

## June 28–July 3

■ *Conference* The 1999 meeting of the Society for the Preservation of Natural History Collections (SPNHC) took place at the Smithsonian Institution. The conference was cosponsored by two Smithsonian units with an active interest in the area of preservation of science collections, the

Smithsonian Center for Materials Research and Education and the National Museum of Natural History, and attracted around 200 attendees from all over the United States and Canada. The program included scientific sessions in the Ripley auditorium, field trips to various Smithsonian sites, and workshops on particular subjects of practical interest.

## June 28–August 9

■ *International training course* "Preservation for Paper-based Collections," a six-week international course, was organized and hosted by the Smithsonian Center for Materials Research and Education in collaboration with the International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM) in Rome. ICCROM is an intergovernmental organization with 92 member states, of which the United States is one. Thirteen professionals, including conservators, librarians, archivists, and curators, from Australia, Brazil, Estonia, Ireland, Latvia, Mongolia, Nigeria, Pakistan, the Solomon Islands, St. Kitts and Nevis, Sweden, the United Kingdom, and Zimbabwe, participated in this event, a first in the United States. The curriculum materials for this course, which is a direct extension of other SCMRE educational programs in the area of paper-based research collection preservation, are all Web based.

## June 29

■ *Exhibition* "El Nuevo Mundo/The New World: The Landscape of Latino LA," Cooper-Hewitt, National Design Museum.

## June 29

■ *Exhibition* "Under the Sun: An Outdoor Exhibition of Light," Enid Haupt Garden, Smithsonian Mall, Washington, D.C., Cooper-Hewitt, National Design Museum.

## June 30–July 2

■ *Workshop* The Tropical Research Institute's FACE (Free Atmosphere Carbon Enhancement) Ring Project held a workshop to review the progress of the prototype project, reach a consensus on the scientific direction of the Panama FACE site, and elaborate a funding strategy. The project was officially inaugurated during the workshop with the attendance of Panamanian, U.S., and Canadian officials and representatives from the agencies and corporations involved.

## July

■ *Award* Dr. Caroline Jones, assistant professor of contemporary art and criticism at Boston University, has been awarded the Smithsonian American Art Museum's 1999 Charles C. Eldredge Prize for Distinguished Scholarship in American Art for her book *Machine in the Studio: Constructing the Postwar American Artist* (University of Chicago Press, 1997).

## July

- *Conference paper* Pamela Henson, Institutional History Division, Smithsonian Institution Archives, presented a paper on “Invading Arcadia: Smithsonian Women Scientists in Latin America, 1900–1950” at the biennial meeting of the International Society for the History, Philosophy, and Social Studies of Biology (Oaxaca, Mexico).

## July

- *Landmark mission* The Chandra X-ray Observatory is successfully launched.

## July

- *Latino resident* Mario Ascensio began his one-year professional residency, supported by the Smithsonian Center for Latino Initiatives. Ascensio, who received his Master of Library and Information Science degree from University of California Los Angeles, was based in the National Museum of American History Library and rotated through several of the other Libraries’ units.

## July

- *Society established* The Smithsonian Libraries and its Board created the Spencer Baird Society. Named for the Smithsonian’s second Secretary, this annual giving and premiere donor-recognition society recognizes individuals who provide significant philanthropic support for top priority projects of the Libraries.

## July

- *Publication* Advice entitled “SI Archives Information on E-mail & Official Records” for SI staff about managing their e-mail stored in GroupWise during planned migration to GroupWise 5.5 was placed on PRISM.

## July

- *Exhibit* In time for the anniversary of the Apollo 11 Moon landing in July, a visitor-operated video camera was placed in the National Air and Space Museum’s lunar module so that visitors could look around inside the craft.

## July 1

- *Publication* Thirty-eight additional pages were distributed to holders of the *Smithsonian Design Guidelines*, which govern use of the new logo system in the Institution’s visual identity program, initiated in 1998.

## July 1–29

- *Public program* The National Portrait Gallery presented “The Roots of Rock and Roll,” a series of lunchtime and evening concerts, each Thursday. The series examined the roots of a phenomenon that profoundly changed popular

music, and looked at the major influences on and contributors to the beginnings of rock and roll, such as rhythm and blues, rockabilly, the Latin link, doo-wop, and the soul sound. Funding for the courtyard concerts was provided by The Morris and Gwendolyn Cafritz Foundation with in-kind support from the Henley Park Hotel.

## July 1–December 1

- *Traveling exhibition* “George C. Marshall: Soldier of Peace,” an exhibition organized by the National Portrait Gallery was on view at the Truman Presidential Library in Independence, Missouri.

## July 2

- *Concert* The Center for Folklife and Cultural Heritage, in collaboration with the National Museum of American History’s *Encuentros* program, produced a conjunto concert and dance party to mark the release of the Smithsonian Folkways recording, *Taquachito Nights: Conjunto Music from South Texas*, produced in partnership with the Narciso Martínez Cultural Arts Center of San Benito, Texas.

## July 2–January 9

- *Exhibition* “Unauthorized Portraits: The Drawings of Edward Sorel” was on view at the National Portrait Gallery. The exhibition was the first museum exhibition of the work of this renowned satirist. It featured original drawings from the 1960s to the present day, as well as some of the magazines in which his cartoons and illustrations appeared.

## July 8

- *American Prairie opens* A pair of bison calves, prairie dogs, 110 species of living plants, and more than 400 interpretive graphics depict the biological complexity of the American plains. American Prairie is the focal point of the National Zoo’s renovation of its central plaza.

## July 9

- *Symposium* Tropical Research Institute’s in-house Interactions Symposium was held at the Earl S. Tupper Research and Conference Center. Staff scientists, fellows, and visitors contributed with 21 presentations.

## July 9–20

- *Study tour* Smithsonian Study Tours, a division of The Smithsonian Associates, launched its first European study tour for families. Forty-one Associates, including grandparents, parents, and grandchildren, explored life in an Italian hill town on the “Tuscany for Families” study tour.

## July 13

- *Event* Admiral Donald D. Engen, director of the National Air and Space Museum since July 1, 1996, was killed in a motorized glider accident.

## July 15

■ *Exhibition* "Directions—Sam Taylor-Wood," the first solo show in an American museum for this young British artist (b. 1967), opened at the Hirshhorn Museum and Sculpture Garden with a slide-illustrated talk by the artist in the museum's Ring Auditorium. Taylor-Wood is part of a new generation of artists in Great Britain who have gained wide recognition. The exhibition featured one of her newest video installations, *Noli Me Tangere*, in which the projected image of a muscular, Atlas-like figure strains to hold up the ceiling, evoking a Colossus, or load-bearing figure, from ancient architecture. Associate Curator Olga M. Viso organized the exhibition, which was generously supported by the Elizabeth Firestone-Graham Foundation and Lannan Foundation, with projection equipment and technical assistance supplied by BARCO Projection Systems.

## July 16

■ *Exhibition* "Modern Uses of Gold" opens at the National Postal Museum.

## July 18–23, July 25–30

■ *National meetings* As part of its Leadership and Assistance for Science Education Reform (LASER) initiative, the National Science Resources Center offers a national Strategic Planning Institute each year at the Smithsonian Institution in Washington, D.C. The LASER initiative is designed to reach school districts through eight regional partnerships involving universities, corporations, state departments of education, and the National Science Foundation Systemic Initiative Projects. LASER programs encourage districts to address the National Science Education Standards, as well as state and local standards in developing science education reform strategies. A six-day LASER event, called a Strategic Planning Institute, consists of interactive workshops and discussions during which leadership teams develop five-year strategic plans to reform K–8 science education in their districts. These national institutes bring faculty from across the nation to share best practices, as well as offering an opportunity for companies and organizations that want to initiate reform to learn about effective practices. During the summer of 1999, LASER presented two national Strategic Planning Institutes during two consecutive weeks. Thirty teams participated in these two institutes, including one team from Sweden. These institutes were held in conjunction with a special exhibit at the Smithsonian Institution—the Microbes exhibit, sponsored by Pfizer, which provided partial support for the NSRC institutes.

## July 18–October 17

■ *Exhibition* The National Museum of African Art presented "Hats Off: A Salute to African Headwear," a Point of View Gallery exhibition featuring the innumerable types of headwear worn by African peoples.

## July 19

■ *Staff appointment* Beverly With was appointed head of the development office of the Freer Gallery of Art and Arthur M. Sackler Gallery

## July 22

■ *Special event* The B&O Railroad Museum (Baltimore, Maryland) implemented its affiliation in a press event with Secretary I. Michael Heyman. A artifact from a B&O Railroad caboose—on loan from the National Museum of American History—was unveiled as part of the event.

## July 23–October 10

■ *Traveling exhibition* "Philippe Halsman: A Retrospective," an exhibition organized by the National Portrait Gallery, was on view at the Grand Rapids Art Museum, Michigan.

## July 24

■ *Public program* An all-day seminar, "A Virtual Climb of Mount Everest," produced by The Smithsonian Associates, featured the extraordinary adventurers of sherpa Norbu Tenzing, son of legendary climber Tenzing Norgay, geologist Roger Bilham, anthropologist James Fisher, high-altitude physiologist Peter Hackett, historian Stephen Venables, and climber Robert Anderson.

## July 27

■ *Agreement* The Tropical Research Institute signed a five-year renewable agreement for scientific and academic collaboration with the City of Knowledge Foundation, to contribute to the diffusion of publications and reports resulting from joint scientific research and educational programs.

## July 28

■ *Publication* The Office of Public Affairs issued a newly updated brochure, "Smithsonian Access," a guide for disabled visitors. Distribution by the Visitor Information and Associates' Reception Center at museum information desks and by mail began immediately.

## July 29–December 5

■ *Exhibition* "Photographing History: Fred J. Maroon and the Nixon Years, 1970–1974" at the National Museum of American History. An intimate and dramatic view of the Nixon presidency through the lens of Fred J. Maroon, a distinguished Washington photographer. His pictures, many of which have never been exhibited before, capture a turning point in American political life.

## August

■ *Award* Ella Jenkins, Smithsonian Folkways Recording artist and advisory council member, was selected as a recipi-

ent of the 1999 ASCAP Foundation Lifetime Achievement Award. The award is a tribute to veteran music creators who, over the years, have made significant contributions to the nation's music culture, and Ella was the first recipient in the field of children's music, as well as the first woman honoree.

## August

- *Construction contract* The Office of Contracting awarded a construction contract to Twin Towers Enterprises for the fourth floor renovations and windows replacement at the Carnegie Mansion and Miller Fox Townhouse of the Cooper-Hewitt, National Design Museum.

## August

- *Donation* The Smithsonian Libraries received a significant donation from Mrs. Gail D. Kaufmann of 11 rare volumes, dating from 1585 to 1843 and relating to medicine. Collected by her physician parents in Czechoslovakia, the volumes have been added to the research collections of the Dibner Library of the History of Science and Technology.

## August

- *Index available on-line* The Libraries completed a multi-year project funded by the Getty Grant Program, creating approximately 25,000 on-line bibliographic records relating to the literature of African art and culture. Museum of African Art Branch librarian Janet Stanley, author of the bibliographic index and principal investigator for the grant, began to compile the information in 1979 and she will continue adding records as new literature on African art is published. Since these records of the African Art bibliographic index have been available with the Libraries' catalog on SIRIS ([www.siris.si.edu](http://www.siris.si.edu)), reference and interlibrary loan inquiries to the African Art Branch library have more than tripled.

## August

- *Contract* The National Postal Museum signs a contract with Gallery Systems, Incorporated, of New York for a new automated collections information system, The Museum System (TMS).

## August

- *Scientist appointment* Dr. Ilka Feller is hired as SERC Staff Scientist and Principal Investigator in terrestrial animal ecology with emphasis on insect-plant interactions.

## August 1

- *Educational outreach* The Smithsonian American Art Museum forms a museum-school partnership with Mosby Woods Elementary School, which was awarded a NEA grant to develop a model program for Fairfax County.

## August 1

- *Exhibition* The Arthur M. Sackler Gallery opened an exhibition, titled "Yoshida Hiroshi: Japanese Prints of India and Southeast Asia." The 32 woodblock prints on display, created by a prominent Japanese painter and print artist were based on his travels in 1930.

## August 6

- *Announcement* The Smithsonian American Art Museum and the National Portrait Gallery announce a major upcoming renovation of the Old Patent Office Building, the historic home for both museums. The building will be closed during the renovation, which is expected to take three years.

## August 7

- *Public program* The National Museum of American History's Lemelson Center celebrates National Inventors Month with a full day of free workshops, demonstrations, and activities on playful inventions for all ages.

## August 9–13

- *Professional education course* "Wood Anatomy and Identification," a course designed and hosted by the Smithsonian Center for Materials Research and Education, was given for the first time as part of the series offered by the laboratory's optical microscopy program. Nine museum professionals attended this practical workshop.

## August 12

- *Professional institute* The Smithsonian Associates presented the first of its quarterly Creativity Institutes for Lockheed Martin Leadership Institutes, which will reach approximately 100 top Lockheed Martin executives annually.

## August 13–November 14

- *Traveling exhibition* "Teddy Roosevelt: Icon of the American Century," an exhibition co-organized by the National Portrait Gallery and the National Park Service, U.S. Department of the Interior, was on view at Hillwood Art Museum, Long Island, New York.

## August 23–27

- *Science faculty workshop* As part of the ongoing collaboration between the Smithsonian Center for Materials Research and Education and Santa Clara University, the workshop "Chemical Characterization of Archaeological Materials: An Interdisciplinary Approach to Variability" was held at the university. Organized and taught by SCMRE faculty, and based on the experience and expertise gained in the context of research at SCMRE, this workshop focused on the scientific analysis of archaeological materials, especially ceramics.

A multi-disciplinary audience of university faculty, including chemists, biologists, archaeologists, and anthropologists, attended this workshop.

### August 25

■ *Acquisition* *Are Years What?* (for Marianne Moore), 1967, a monumental steel sculpture by the American artist Mark di Suvero (b. 1933), was installed as a new acquisition in the street-level section of the Hirshhorn Museum's Sculpture Garden along Jefferson Drive. The dynamic 40-foot-high composition of bright-red I-beams fusing industrial engineering, abstract art, and pure lyricism takes its title from a poem by the American writer Marianne Moore (1887–1972). Considered one of the artist's greatest works, it was acquired in part through the Joseph H. Hirshhorn Purchase Fund and in part as a gift from the Institute of Scrap Recycling Industries. *Are Years What?* affirms the authority of the Hirshhorn's collection of monumental contemporary sculpture.

### August 28

■ *Event* The Visitor Information and Associates' Reception Center hosted a pre-La Cumbre trade show breakfast for national tour operators with the Washington, D.C. Convention and Visitor Association.

### September

■ *Exhibition* The gondola of Breitling Orbiter 3, which completed the first non-stop balloon flight around the world, went on display in the National Air and Space Museum's Milestones of Flight gallery.

### September

■ *Exhibition* "Posted Aboard the RMS *Titanic*" opens at the National Postal Museum.

### September

■ *Lecture series* A 10-part evening lecture series entitled "An Ecological History of the Chesapeake Bay" began at SERC's Philip D. Reed Education Center.

### September

■ *Publication* Information was provided and reviewed by Frank Millikan and Marc Rothenberg of the Joseph Henry, Papers Project, Smithsonian Institution Archives, for a featured article about Joseph Henry, which appeared in the syndicated Mini Page.

### September

■ *Publication* The report "Smithsonian Institution Archives Appraisal Methodology" was written by the Records Man-

agement Team, Archives Division, Smithsonian Institution Archives.

### September

■ *Publicity campaign* The Office of Public Affairs' publicity campaign for Hispanic Heritage Month included news releases, radio advertisements on Spanish-language stations, and ads in local Spanish-language newspapers.

### September

■ *Radio advertising campaign* Beginning this month and continuing for six months, the Office of Public Affairs bought commercial time on WTOP radio, the dominant news-talk station in the Washington, D.C., area, to run advertisements called "Inside the Smithsonian." They were broadcast every Friday morning during drive time and featured information for area residents on everything from what's new at the museums to the latest artifact acquisition.

### September

■ *Research result* SAO scientists aid in the discovery of three new moons around Uranus.

### September

■ *Scientist appointment* Dr. Peter Marra is hired as SERC Staff Scientist and Principal Investigator in terrestrial animal ecology with emphasis on avian ecology.

### September 4

■ *Exhibition* The SITES exhibition "Women of Taste: A Collaboration Celebrating Quilt Artists and Chefs" premiered at Silver Dollar City in Branson, Missouri. The two exhibitions, each of 50 dynamic culinary quilts, was the result of pairing women chefs and quilters together.

### September 10

■ *Donation* The Paul Singer Collection, more than 5,000 objects of which a majority are from ancient China, was given to the Arthur M. Sackler Gallery jointly by The Arthur M. Sackler Foundation; Paul Singer; the AMS Foundation for Arts, Sciences and Humanities; and the children of Arthur M. Sackler. This represented the largest acquisition of Chinese art the Sackler Gallery has received since it opened in 1997.

### September 10

■ *Staff appointment* Kenneth J. Myers, a specialist in nineteenth- and twentieth-century American painting and photography joined the staff of the Freer Gallery of Art and Arthur M. Sackler Gallery as assistant curator of American art.



### September 10

■ *Student workshop* In conjunction with the exhibition and in collaboration with the Museum Studies department and students of the Duke Ellington School of the Arts, D.C. Public Schools, the National Portrait Gallery offered “Paul Robeson: Artist and Citizen” an interactive, fun workshop for students that combined art activities and learning about the life and career of Paul Robeson.

### September 12

■ *Exhibition* The National Museum of African Art opened a major exhibition “Wrapped in Pride: Ghanaian Kente and African American Identity,” a unique collaboration between the National Museum of African Art and the Anacostia Museum and Center for African American History and Culture. The two-sided exhibition offered visitors not only a glimpse into the history and meaning of the colorful African textile, but provided both programming and interactive activities that engaged diverse audiences. School groups and teachers from hundreds of schools took advantage of related programming including exhibition tours, weaving demonstrations by master weavers from Ghana, and teacher workshops.

### September 12

■ *Print advertising* The Office of Public Affairs bought two half-page ads in the *Washington Post's* autumn preview section to advertise exhibitions and programs available to Smithsonian museum visitors.

### September 13

■ *Appointment* The Tropical Research Institute appointed I. Fang Sun, professor at Tunghai University in Taichung, Taiwan, as Asia Program Coordinator for the Center for Tropical Forest Science.

### September 13

■ *Press announcement* The Office of Public Affairs handled the public announcement and publicity when the Board of Regents named Lawrence M. Small as the new Smithsonian Secretary. The Secretary-designate's biography and other materials were available to staff, the public, and the press at the event in the Enid A. Haupt Garden.

### September 15

■ *Publication* Hawai'i has more endangered and threatened plants than any other state in the United States (263/699 taxa or 38 percent U.S. listed vascular plants). Because of the magnitude of the conservation problems in the Hawaiian Islands, it is vital that biologists, conservationists, and land managers have the most up-to-date information possible. To meet this need the Pacific Islands Program in the Department of Botany at the National Museum of Natural History, led by Warren L. Wagner, produces periodic assessments of Hawaiian vascular

plant species at risk. To date, assessments have been published in 1990 and 1999. These assessments encourage the survey, conservation, and management of the dwindling and degrading natural habitat throughout the state.

### September 15–October 15

■ *Outreach* As part of the Smithsonian's Hispanic Heritage Month activities, the Archives of American Art presents a special Web site location to announce the recent acquisition of the papers of curator and art historian Giulio V. Blanc and other Archives' Latino initiatives.

### September 16–30

■ *Public program* The National Portrait Gallery participated in the Hispanic Heritage Month with the Latino Festival of a series of feature films, shorts, and documentaries presented in celebration of Hispanic Heritage Month. Included were a mix of U.S.-made films currently on the independent film festival circuit and classics such as *Salt of the Earth*. Latin Festival activities were made possible by the Smithsonian Center for Latino Initiatives.

### September 17–18

■ *Public program* The Smithsonian Associates celebrated the 224th year of the U.S. Marine Corps in a weekend seminar that presented active and former Marines, including Commandant James L. Jones, Art Buchwald, Mark Russell, Jim Lehrer, and William Styron.

### September 18

■ *Family day* The National Museum of African Art hosted a family day on the arts and culture of Ghana with food, music, song, a dance procession, games, demonstrations, and storytelling.

### September 18

■ *Public program* The National Museum of American History celebrates “Star-Spangled Family Day” as part of its OurStory program. Children's author Steven Kroll read from his book, *By the Dawn's Early Light: The Story of the Star-Spangled Banner*. The Fort McHenry Color Guard raised a smaller reproduction of the Star-Spangled Banner. Visitors met museum historians and conservators, and activities throughout the museum included living history presentations, arts and crafts, and musical performers.

### September 20

■ *Public program* The National Portrait Gallery participated in the Hispanic Heritage Month with the Latino Festival presentation of “The Afro-Latino Presence in American Literature.” This panel of three critically acclaimed Afro-Latino authors examined the Afro-Latino experience. Panelists included Piri Thomas, author of *Down These Mean Streets*; Junot

Díaz, author of *Drown*; and Loida Maritza Pérez, author of *April 3, 2001*. Cosponsored with the Hispanic Heritage Month Planning Committee.

### September 22

- *Award* The Archives of American Art receives a gift from the Gerta Charitable Trust for the processing and microfilming of the papers of Marcel Breuer, noted twentieth-century architect and designer.

### September 24

- *Award* Japanese art historian Toshie Kihara, an official of Japan's Agency for Cultural Affairs, received the Shimada Prize for distinguished scholarship in the history of East Asian art. The prize, which includes \$10,000, is presented biennially by the Freer Gallery of Art and Arthur M. Sackler Gallery and the Metropolitan Center for Far Eastern Art Studies in Kyoto, Japan.

### September 24–30

- *Exhibition* "Glass! Glorious Glass!" was on view at the Smithsonian American Art Museum's Renwick Gallery. This exhibition, which explored the variety of work being created with glass, is the first in a series that focuses on a specific medium in the expanding craft collection of the museum.

### September 24–January 2

- *Exhibition* "A Durable Memento: Portraits by Augustus Washington, African American Daguerreotypist" was on view at the National Portrait Gallery. This was the first major exhibition of daguerreotype portraits by Augustus Washington, one of America's earliest and most important black photographers. The show included 33 daguerreotypes from two distinct periods in Washington's career: his tenure as one of the principal daguerreotypists in Hartford, Connecticut (1846–1853) and the early years of his residency in Liberia where he settled in 1853.

### September 25

- *Exhibition* The National Air and Space Museum exhibition "*Star Wars: The Magic of Myth*" opened at the San Diego Museum of Art, the first venue on the SITES two-year tour. Showcasing models, costumes, props, and original artwork from the archives of Lucasfilm, Ltd., the exhibition

traces the *Star Wars* film trilogy and how it presents Luke Skywalker as an archetypal hero.

### September 25

- *Exhibition* The SITES exhibition "Serving Home and Community: Women of Southern Appalachia" premiered at Ohio University at Zanesville. Documentary photographer Barbara Beirne traveled to Virginia, Tennessee, Kentucky, and West Virginia, photographing and interviewing many of the remarkable women that call this region home.

### September 26

- *Festival* The National Zoo's Conservation and Research Center at Front Royal hosts its Autumn Conservation Festival, a one-day event that opens the facility to the public.

### September 28

- *Ground breaking* Working with the National Museum of the American Indian, the Office of Public Affairs played a leading role in the publicity campaign that surrounded the museum's ground breaking at the last site on the National Mall.

### September 30

- *Major gift* Paul Peck of McLean, Virginia, gave the National Portrait Gallery \$2 million to promote understanding of the American presidency, the largest individual gift in the museum's history. The gift will endow the Paul Peck Fund for Presidential Studies, and support publications, acquisitions, public programs, media outreach, and the Web site. In honor of Mr. Peck's gift, a space will bear his name when the museum reopens. The gift inaugurated a major fund-raising drive at the Gallery.

### September 30

- *Publication* The Office of Public Affairs issued its newly updated brochure "Exploring African American Heritage at the Smithsonian," which provides detailed information to visitors interested in African American-related exhibitions and programs at the Institution. Distribution by the Visitor Information and Associates' Reception Center at museum information desks and by mail began immediately. The brochure was supported by a grant from the Educational Outreach Fund administered by the Smithsonian Office of Education.

# Academic, Research Training, and Internship Appointments

The first section lists recipients of fellowships and other appointments awarded to scholars and advanced students under the auspices of the Office of Fellowships and Grants. Students and museum professionals who held museum internships or participated in special projects administered by the Center for Museum Services are listed in the second section.

## Academic and Research Training Appointments

The Smithsonian offers, through the Office of Fellowships and Grants, research and study appointments to visiting scientists, scholars, and students. The appointees are provided access to the Institution's facilities, staff specialties, and reference resources. The persons—listed by unit or office—in this Appendix began their residencies between October 1, 1998, and September 30, 1999, and have been in residence for three months or longer. Predoctoral and postdoctoral fellows, visiting scientists or scholars, and other awardees and participants in special programs are so listed. Listed for each fellow or visitor is the institution where each received, or expects to receive, a degree or the home university or institution; a brief description of the project undertaken at the Smithsonian; the Smithsonian advisor; and dates of residency.

## Archives of American Art

Victor Zamudio-Taylor, Rockefeller Humanities Fellow, University of Texas, Austin. "Carlos Almaraz: Painting, the Social Imaginary and Cultural Identity," with Liza Kirwin from December 1, 1998 to May 31, 1999.

## Center for Folklife Programs and Cultural Studies

Stanford W. Carpenter, SI Predoctoral Fellow, Rice University. "Institutional Practices and 'African' Images in Comics," with Richard Kurin and James Early from April 1, 1999 to December 31, 1999.

Stanford W. Carpenter, SI Predoctoral Fellow, Rice University. "Imagining a Unified Africa and the Creation of African-American Identity," with Richard Kurin and James Early from January 1, 1999 to March 31, 1999.

Nancy J. Groce, SI Senior Fellow, New York City. "New York City: Community Music in the Metropolis," with Richard Kurin from October 15, 1998 to October 14, 1999.

Todd D. Harvey, SI Postdoctoral Fellow, Ohio State University. "The Formative Dylan: Early Recordings 1960–65," with Jeffrey Place from September 1, 1999 to June 30, 2000.

Peter J. La Chapelle, SI Predoctoral Fellow, University of Southern California. "'Swinging West': Okie Community, Western Identity and Whiteness in Southern California Country Music, 1939–1969," with Jeffrey Place and Anthony Seeger from July 15, 1999 to October 14, 1999.

## Cooper-Hewitt, National Design Museum

Janin Hadlaw, SI Predoctoral Fellow, Simon Fraser University, Canada. "Communicating Utopia: Design, Modernity, and the Telephone," with Stephen Van Dyk and Bernard Finn from June 1, 1999 to August 31, 1999.

## Freer Gallery of Art/ Arthur M. Sackler Galleries

- Soyoung Lee, SI Predoctoral Fellow, Columbia University. "Placing the Freer's Western Japanese Ceramics in their Historical Context," with Louise Cort from January 15, 1999 to May 14, 1999.
- Xiating Li, SI Senior Fellow, Institute of Archaeology of Shanxi Province, China. "Jin Bronze Art," with Jenny So from March 15, 1999 to June 14, 1999.
- Sharada Srinivasan, Visiting Scholar, University College London, United Kingdom. "Characterisation of Copper Alloys from Peninsular India," with Janet Douglas from April 15, 1999 to October 14, 1999.
- Dashu Qin, SI Postdoctoral Fellow, Peking University, China. "Study of the Relationship and Influence Between Chinese Ceramics and Islamic Pottery," with Jan Stuart and Massumeh Farhad from December 1, 1998 to October 31, 1999.

## Hirshhorn Museum and Sculpture Garden

- JoAnne Marie Mancini, SI Postdoctoral Fellow, University College Cork, National University of Ireland. "Modernism's Machinery: American Art Criticism, 1865-1929," with Judith Zilczer and Virginia Mecklenburg from June 1, 1999 to September 30, 1999.

## National Air and Space Museum

- Erik M. Conway, Guggenheim Fellow, University of Minnesota. "A History of the Air Traffic Control System: Use, User Demands, and the Evolution of a Large-Scale System, 1930-1990," with Paul Ceruzzi and F. Robert van der Linden from October 1, 1998 to September 30, 1999.
- Jeffrey A. Engel, Guggenheim Fellow, University of Wisconsin, Madison. "The Historiography and Journals of Civil Aviation," with F. Robert van der Linden from August 15, 1999 to August 14, 2000.
- Robert E. Hunter, Guggenheim Fellow, University of Illinois, Chicago. "Blimps and Budgets: The U.S. Naval Airship Program, 1945-1962," with Tom Crouch from March 1, 1999 to May 31, 1999.
- Bettyann Holtzmann Kevles, Visiting Scientist, Columbia University. "Women Astronauts," with Gregg Herken from February 15, 1999 to August 14, 1999.
- Richard C. Knott, USN, Ramsey Fellow, Fairfax, Virginia. "Naval Light Attack Air Support of Riverine Forces in the Mekong Delta During the Vietnam War," with Dominick Pisano from January 1, 1999 to December 31, 1999.
- William F. Trimble, Charles A. Lindbergh Chair in Aerospace History, Auburn University. "The Search for a New

Order of Sea Power: Technological Change and the Navy's Nuclear Strike Role, 1945-1960," with Dominick Pisano from July 15, 1999 to July 14, 2000.

- Jason D. Weems, Guggenheim Fellow, Stanford University. "Barnstorming the Prairies: Flight, Aerial Views, and the Idea of the Midwest, 1920-1940," with Tom Crouch from September 15, 1999 to September 14, 2000.
- Thomas Wildenberg, Ramsey Fellow, University of Maryland. "Joseph Mason Reeves and the Origins of Carrier Doctrine in the U.S. Navy," with Dominick Pisano from October 1, 1998 to September 30, 1999.

## National Museum of American Art

- Rocio Aranda-Alvarado, Predoctoral Fellow in Latino Studies, City University of New York. "Four Modernists in Harlem and Havana: Constructing a New World Identity," with Katherine Manthorne from October 1, 1998 to September 30, 1999.
- M. Rachael Arauz, SI Predoctoral Fellow, University of Pennsylvania. "Articulating 'American': Text and Image Among the Early American Modernists," with Joann Moser from November 1, 1998 to April 30, 1999.
- Sara A. Butler, SI Predoctoral Fellow, University of Virginia. "A Complex Alliance: Treasury Art and Architectural Institutions in the 1930s," with Virginia Mecklenburg and Richard Murray from June 1, 1999 to November 30, 1999.
- Constance J.S. Chen, SI Predoctoral Fellow, University of California, Los Angeles. "Passion and Discipline: Oriental Art and the Culture of Modernity in the United States, 1893-1944," with Joann Moser and Colleen Hennessy from April 1, 1999 to June 30, 1999.
- Martha M. Evans, SI Predoctoral Fellow, Columbia University. "Claude Raguet Hirst: Gender and Genre in Turn-of-the-Century America," with Kenneth Trapp and Katherine Manthorne from September 1, 1999 to December 31, 1999.
- Alicia Gaspar de Alba, Rockefeller Humanities Fellow, University of New Mexico. "Place and Identity in the Construction of Chicana Aesthetics," with Andrew Connors from March 1, 1999 to June 30, 1999.
- Cristina Klee (Bishop), SI Predoctoral Fellow, University of Delaware. "Sentiment as Strategy in Nineteenth-Century American Visual Culture," with William Truettner and Katherine Manthorne from September 1, 1999 to August 31, 2000.
- Tirza T. Latimer, SI Ten-week Graduate Student Fellow, Stanford University. "Romaine Brooks' Portraiture: A Specifically Lesbian Revision of the Decadent Canon?" with Virginia Mecklenburg from June 21, 1999 to August 27, 1999.
- Stephen H. Longmire, SI Predoctoral Fellow, University of Chicago. "Picture a Life: The Photo-Texts of Wright Morris," with Merry Foresta and Virginia Mecklenburg from September 1, 1999 to February 28, 2000.

Amy M. Mooney, SI Predoctoral Fellow, Rutgers University. "Documents in Review: The Art of Archibald J. Motley, Jr. and the Formation of a National Identity," with Lynda Hartigan and Virginia Mecklenburg from September 1, 1999 to August 31, 2000.

Kevin R. Muller, SI Predoctoral Fellow, University of California, Berkeley. "Cultural Costuming: Native Americans, Inversion, and the Power of an Exceptional White Masculinity," with William Truettner from October 1, 1998 to September 30, 1999.

Jennifer L. Roberts, SI Predoctoral Fellow, Yale University. "Mirrored Travels: Robert Smithson and the American Expeditionary Landscape," with William Truettner and Merry Foresta from April 1, 1999 to March 31, 1900.

Ethan Robey, SI Predoctoral Fellow, Columbia University. "The Utility of Art: Mechanics' Institute Fairs in New York City, 1828–1870," with William Truettner and Katherine Manthorne from October 1, 1998 to June 30, 1999.

Terezita Romo, Rockefeller Humanities Fellow, California State University. "Points of Convergence: Research into the Iconography of Chicano Posters," with Andrew Connors from April 1, 1999 to October 31, 1999.

Eric J. Segal, SI Predoctoral Fellow, University of California, Los Angeles. "Realizing Whiteness in U.S. Visual Culture: The Popular Illustration of J.C. Leyendecker, Norman Rockwell, and the *Saturday Evening Post*, 1917–1945," with Virginia Mecklenburg from October 1, 1998 to June 30, 1999.

Margaret A. Stenz, SI Predoctoral Fellow, City University of New York. "The Representation and Ideology of Ethnicity in the Art of the Ashcan School: The Ethnic Portraits of Robert Henri," with Virginia Mecklenburg from June 1, 1999 to August 31, 1999.

Justine Angeliqe Walden, Renwick Fellow, University of Pennsylvania. "American Textiles: Art, Craft, Design and Industry, 1930–1950," with Kenneth Trapp from June 1, 1999 to August 31, 1999.

## National Museum of African Art

Judith Davis Freeman, SI Predoctoral Fellow, University of Arizona. "Colonial Fetishes and Other Regimes of Passion: Missions, Museums, and the Collecting of Lower-Congo 'Minkisi'," with David Binkley and Christraud Geary from September 1, 1999 to May 31, 2000.

Joanna L. Grabski, SI Predoctoral Fellow, Indiana University. "The Historical Invention and Contemporary Practice of Modern Art in Senegal," with Janet Stanley and Mary Jo Arnoldi from August 1, 1999 to July 31, 2000.

Elizabeth A. Peri-Willis, Short-term Visitor, Office of the Parliamentary Committee. "Materials, Tools and Technologies: the Development of a Tradition by Two Ghanaian Artists, El Anatsui and Atta Kwami," with Andrea Nicolls from March 15 to June 15, 1999.

## National Museum of American History

Regina Lee Blaszczyk, Lemelson Center Senior Fellow, University of Delaware. "The Color Revolution: Playful Innovation?" with Arthur Molella from June 1, 1999 to August 31, 1999.

Yakup Bektas, SI Postdoctoral Fellow, University of Kent, U.K. "Missionary of Science to the Old Oriental Empire": John Lawrence Smith in the Service of the Sultan, 1846–1851," with Bernard Finn and Steven Lubar from November 1, 1998 to October 31, 1999.

John G. Cloud, SI Predoctoral Fellow, University of California, Santa Barbara. "Gravity's Other Rainbow: An Exploration of Progress in American Geodesy and Knowledge During the Cold War," with Deborah Warner from June 1, 1999 to March 31, 2000.

Timothy Davis, Lemelson Center Senior Fellow, Historic American Engineering Record. "Reconciling the Machine and the Garden: Inventing America's National Park Roads and Parkways," with Arthur Molella from December 1, 1998 to May 31, 1999.

Thomas A. Denenberg, SI Predoctoral Fellow, Boston University. "Consumed by the Past: Wallace Nutting and the Invention of the 'Old' America," with Rodris Roth and Helena Wright from December 1, 1998 to August 31, 1999.

Jorge L. Duany, Senior Fellow, University of Puerto Rico. "Collecting the Nation: The Construction and Representation of Cultural Identities in Puerto Rico and the Diaspora," with Marvette Perez and Miguel Bretos from August 1, 1999 to January 31, 2000.

Marc S. Ferris, SI Predoctoral Fellow, State University of New York, Stony Brook. "The History and Symbolic Significance of 'The Star-Spangled Banner'," with Lonny Taylor from June 1, 1999 to August 31, 1999.

Kathleen G. Franz, Lemelson Center Senior Fellow, Brown University. "Travelers and Tinkers: Automobiles, Amateurs, and Technological Authority in the Twentieth Century," with Arthur Molella from June 1, 1999 to August 31, 1999.

Briann G. Greenfield, SI Predoctoral Fellow, Brown University. "Constructing History," with Steven Lubar and Pamela Henson from June 1, 1999 to November 30, 1999.

J. Kehaulani Kauanui, SI Predoctoral Fellow, University of California, Santa Cruz. "Miscegenation, Race, and Representations of Amalgamation and Dilution in Anthropometric Studies of Hawaiian Hybridity," with Rayna Green and Adrienne Kaeppler from October 1, 1998 to June 30, 1999.

Ann M. Kilkelly, SI Senior Fellow, Virginia Polytechnic Institute and State University. "Tapping the Margins," with Pete Daniel and Dwight Blocker Bowers from June 1, 1999 to August 31, 1999.

Krystyn R. Legg, SI Predoctoral Fellow, Johns Hopkins University. "Images of Asia in American Popular Music, 1880–1930," with Fath Davis Ruffins and Franklin Odo from June 1, 1999 to September 30, 1999.

- Thomas M. McCarthy, SI Predoctoral Fellow, Yale University. "Cars, Consumers, and the Environment," with Jeffrey Stine and Charles McGovern from September 1, 1999 to December 31, 1999.
- Arwen Palmer Mohun, SI Senior Fellow, University of Delaware. "Technology, Safety, and Risk in Industrializing America," with Steven Lubar from September 1, 1999 to November 30, 1999.
- Javier Morillo-Alicea, Predoctoral Fellow, University of Michigan. "Colonial Information Across Spanish and U.S. Empires, 1863–1934," with Marvette Perez from August 1, 1999 to July 31, 2000.
- Nadine C. Naber, SI Ten-week Graduate Student Fellow, University of California, Davis. "The Crisis of Community Boundaries: Gendered Endogamy among Arab Americans," with Fath Davis Ruffins from October 5, 1998 to December 11, 1998.
- Mary C. Neth, SI Senior Fellow, University of Missouri. "Tapping the Margins," with Pete Daniel and Dwight Blocker Bowers from June 1, 1999 to August 31, 1999.
- David A. Pantalony, SI Ten-week Graduate Student Fellow, University of Toronto. "The Koenig Collection at the Smithsonian Institution," with Deborah Warner and Steven Turner from June 14, 1999 to August 20, 1999.
- Adrienne M. Petty, SI Predoctoral Fellow, Columbia University. "Standing Their Ground: Small Farmers in North Carolina's Tobacco Belt," with Pete Daniel from September 15, 1999 to December 14, 1999.
- Chris Allen Rasmussen, SI Postdoctoral Fellow, Rutgers University. "Automatic Age: Coin Machines, Coin Men and Consumer Culture," with Charles McGovern and Steven Lubar from July 1, 1999 to December 31, 1999.
- Elena Razlogova, SI Predoctoral Fellow, George Mason University. "Living with Mass Culture: Ordinary Americans and the Radio Industry, 1920–1950," with Charles McGovern from September 1, 1999 to August 31, 2000.
- Natalie J. Ring, SI Predoctoral Fellow, University of California, San Diego. "'The Benighted South': The Evolution of a Regional Image and Its Relationship to National Identity, 1890–1930," with Pete Daniel and Charles McGovern from June 1, 1999 to August 31, 1999.
- George Sanchez, Rockefeller Humanities Fellow, University of Southern California. "Latino Identities, American Identity: Exploring Latino Ethnicity in Urban America," with Charles McGovern from June 1, 1999 to July 30, 2000.
- Helen D. Sheumaker, SI Predoctoral Fellow, University of Kansas. "Nineteenth-Century Hair Work and the American White Middle Class," with Charles McGovern and Anne Serio from July 15, 1999 to January 14, 2000.
- Chris R. Stacey, SI Predoctoral Fellow, Rutgers University. "Relocation of Native Americans During the 1950s from Reservations to Urban Areas," with Rayna Green from October 1, 1998 to January 31, 2000.
- Elizabeth P. Stewart, SI Predoctoral Fellow, American University. "Mermaids and Perpetual Motion: A Cultural History of Scientific Hoaxes in the U.S., 1835–1910," with Charles McGovern and Arthur Molella from September 1, 1999 to May 31, 2000.
- David Suisman, SI Predoctoral Fellow, Columbia University. "The Sound of Money: Music, Machines, and Markets, 1850–1925," with Charles McGovern from September 1, 1999 to August 31, 2000.
- Arlene Torres, Rockefeller Humanities Fellow, University of Illinois. "Puerto Ricans in Search of Africanity, Blackness and the 'Nation' in Unusual Spaces, Places and Locales," with Fath Davis Ruffins and Marvette Perez from July 1, 1999 to December 31, 1999.
- Bernard O. Unti, SI Predoctoral Fellow, American University. "Concern for Animals in the United States Before the Second World War," with Patricia Gossel from September 1, 1999 to May 2000.

## National Museum of the American Indian

- Carmen Arellano, Visiting Scholar, Catholic University, Eichsatt. "Research for the Mall Museum's Three Major Galleries: Our Peoples, Our Universes, Living in Our Universe," with Ramiro Matos and Bruce Bernstein from September 15, 1999 to September 14, 2001.
- Kelly Marie McHugh, Postgraduate Conservation Intern, New York University. "Conservation Internship," with Marian Kaminitz from January 1, 1999 to May 31, 2000.
- Timothy J. Sullivan, Visiting Scholar, Australian Museum. "Repatriation in Two Domains: Effectiveness in USA and Australia," with Douglas Evelyn from May 1, 1999 to September 30, 1999.

## National Museum of Natural History

- Kristina L. Ackley, SI Predoctoral Fellow, State University of New York, Buffalo. "'We are Oneidas Yet': Discourse, Identity, and Oneida Land Rights," with JoAllyn Archambault from June 1, 1999 to September 30, 1999.
- Gerard J. Allan, Visiting Scientist, Claremont Graduate School. "Evolution of Breeding Systems in Insular Pacific 'Pittosporum' (Pittosporaceae)," with Elizabeth Zimmer from October 15, 1998 to October 14, 1999.
- Joaquin Arroyo-Cabrales, Visiting Scientist, Texas Tech University. "Mammals from the State of Narayit, Mexico," with Don Wilson from October 1, 1998 to September 30, 1999.
- Renner Luiz Cerqueira Baptista, Visiting Scientist, Universidade de Sao Paulo, Brazil. "Studies on the Systematics of the Superfamily Lycosoidea (Araneae)," with Jonathan Coddington from February 15, 1999 to February 14, 1901.
- Robb Brumfield, Visiting Scientist, University of Maryland, College Park. "Unidirectional Introgression of Secondary Sexual Plumage Traits Across an Avian Hybrid Zone: The Role of the Rio Changuinola as a Geographic Barrier to the Spread of Positively Selected Traits," with Michael Braun from June 15, 1999 to December 15, 1999.

- H. David Clarke, Visiting Scientist, University of Illinois, Urbana/Champaign. "Systematics and Evolution of Tribes Acacieae and ingeae (Fabaceae: Mimosoideae)," with Michael Braun and Vicki Funk from March 15, 1999 to July 14, 1999.
- Risa C. Diamond, SI Ten-week Graduate Student Fellow, Southern Methodist University. "A Study of Ethnohistorical Accounts of Early Southwest Pueblo Agricultural Practices," with Bruce Smith from September 13, 1999 to November 19, 1999.
- Stephen D. Gaimari, SI Postdoctoral Fellow, University of Illinois. "Phylogenetics of the Lauxaniidae (Diptera)," with Wayne Mathis and Allen Norrbom from March 1, 1999 to February 28, 1900.
- Jason P. W. Hall, SI Postdoctoral Fellow, University of Florida. "A Phylogeny of the Tribe Nymphidiini (Lepidoptera: Riodinidae)," with Robert Robbins from September 15, 1999 to September 14, 2000.
- Maria Alejandra Jaramillo, SI Predoctoral Fellow, Duke University. "Systematics of the Genus 'Piper' L. (Piperaceae)," with Elizabeth Zimmer and W. John Kress from September 1, 1999 to March 31, 2000.
- Kenneth G. Karol, Visiting Student, University of Maryland. "Molecular Evolution of Both the ITS and trnL-F Noncoding Spacer Sequences in Green Plants," with Elizabeth Zimmer from June 1, 1999 to August 31, 1999.
- Hyi-Gyung Kim, Visiting Scientist, University of Texas, Austin. "Scholarly Studies on the Origin, Evolution and Classification of the Tribe Liabeae (Cichorioideae, Compositae)," with Elizabeth Zimmer from January 1, 1999 to December 31, 1999.
- Michelle A. Loyer, SI Ten-week Graduate Student Fellow, University of Missouri. "Analysis of Bronze Age Fauna from Tell Tuneinir, Syria," with Melinda Zeder from October 12, 1998 to December 18, 1998.
- Svetlana Maslakova, Visiting Student, Moscow State University. "Phylogenetic Analysis of Pelagic Polystyliferous Hoplonemertean of the Phylum Nemertea and Systematic Study of Selected Hoplonemertea," with Jon Norenburg from January 23, 1999 to August 21, 1999.
- Margaret S. Mathewson, Visiting Scholar, University of California, Berkeley. "Analysis of Fiber Plant Materials in Early California Collections at the Smithsonian," with JoAllyn Archambault from January 15, 1999 to May 14, 1999.
- Arion T. Mayes, SI Predoctoral Fellow, University of Colorado. "Skeletal Analysis of Mound Burials from Illinois Bluff," with Douglas Owsley from August 15, 1999 to April 14, 2000.
- Jimmy A. McGuire, SI Postdoctoral Fellow, University of Texas, Austin. "Phylogenetic Systematics and Historical Biogeography of the Southeast Asian Flying Lizards (genus 'Draco')," with Kevin de Queiroz from January 15, 1999 to January 14, 2000.
- David A. McKeown, SI Senior Fellow, Catholic University of America. "Structural Characterization of Mn-Oxide Coatings on Rock Substrates," with Jeffrey Post from June 1, 1999 to May 31, 2000.
- Andrew Mitchell, Visiting Scientist, University of Maryland. "Utility of the 'c-myc' Gene for Avian Systematics, with Special Reference to the Ratites," with Michael Braun from November 1, 1998 to July 31, 1999.
- Molly Nepokroeff, SI Postdoctoral Fellow, University of Wisconsin. "Phylogeny, Biogeography and Evolution of Breeding Systems in Hawaiian and Pacific Psychotria (Rubiaceae)," with Warren Wagner and Elizabeth Zimmer from November 1, 1998 to October 31, 1999.
- Satoshi Okamura, Visiting Scientist, Hokkaido Education University. "Rifting- and Subduction-Related Volcanism of the Northwestern Pacific Rim," with James Luhr from September 1, 1999 to August 31, 1900.
- Megan A. Perry, SI Predoctoral Fellow, University of New Mexico. "A Bioarchaeological Analysis of Garrisons and Trading Stations of the Roman Frontier in the Near East," with Bruno Frohlich from September 15, 1999 to December 14, 1999.
- James R. Rougvié, SI Postdoctoral Fellow, University of Texas, Austin. "The Effects of Low-Temperature Potassium Metasomatism on Volcanic Rocks and Their Metamorphism: A Comparison of Textures and Geochemistry of Jurassic and Tertiary Volcanics, Western United States," with Sorena Sorensen from February 15, 1999 to February 14, 2002.
- Stephen A. Schellenberg, Visiting Student, University of Southern California. "Natural History of the Cenozoic Deep Ocean Ostracode Genus 'Agrenocythere: An Integrated Systematic, Morphometric, and Biogeographic Study," with Richard Benson from April 1, 1999 to August 31, 1999.
- Stephen A. Schellenberg, Visiting Student, University of Southern California. "Cenozoic Deep Ocean Ostracode Genus Agrenocythere," with Richard Benson from September 1, 1999 to December 31, 1999.
- Gary Schwartz, Visiting Scientist, Washington University. "Dental Histology and the Evolution of Human Growth and Development," with Bernard Wood and Richard Potts from July 1, 1999 to June 30, 2002.
- Sonia P. Silva, SI Postdoctoral Fellow, Indiana University. "Baskets in Motion: Life Histories of Objects in the Upper Zambezi and Kasai," with Mary Jo Arnoldi and Christraud Geary from April 15, 1999 to April 14, 2000.
- Brian J. Stafford, Visiting Scientist, City University of New York. "Aerodynamics and Functional Morphology of Flying Squirrels and Flying Lemurs," with Richard Thorington, Jr. from May 1, 1999 to February 28, 2001.
- Tamara A. Stein, SI Predoctoral Fellow, University of Chicago. "Cross-Section Morphology of Long Bones as an Indicator of Locomotor Behavior in Extant Anthropoid Primates: Does Shape Reflect Niche?" with Richard Thorington from October 1, 1998 to December 31, 1998.
- Jaroslawn Stolarski, SI Postdoctoral Fellow, Polish Academy of Sciences. "Early Ontogeny of the Scleractinian Skeleton: Taxonomic, Phylogenetic and Paleoeologic Implications," with Stephen Cairns from November 1, 1998 to October 31, 1999.

## National Portrait Gallery

Toby M. Chieffo, SI Predoctoral Fellow, College of William and Mary. "Nathaniel Jocelyn: In the Service of Art and Abolition," with Ellen Miles and James Horton from September 1, 1999 to August 31, 2000.

## National Zoological Park

Juan Manuel Blanco, Visiting Scientist, Complutense University, Spain. "Comparative Semen Cryopreservation of Poultry and Non-Domestic Avian Species: Development of Applicable Semen Preservation Procedures and Characterization of Sperm Freeze Damage," with David Wildt from November 1, 1998 to April 30, 2000.

Ginger M. Bolen, Visiting Scientist, University of California, Berkeley. "Neophobia and Social Dominance in Mallards and Black Ducks," with Russell Greenberg and Eugene Morton from August 15, 1999 to August 15, 2001.

Marianne Janik, Visiting Student, University of Maryland. "Investigating the Permeability of Zebra Fish Embryos," with Mary Hagedorn from February 1, 1999 to January 31, 2000.

Stacey L. Lance, SI Postdoctoral Fellow, University of Maryland, College Park. "Genetic Variation in Source and Translocated Populations of the Delmarva Fox Squirrel, *Sciurus niger cinereus*," with Jonathan Ballou from October 1, 1998 to September 30, 1999.

Damian C. Lidgard, SI Ten-week Graduate Student Fellow, National University of Ireland. "Alternative Male Mating Strategies in a Polygynous Mammal: The Grey Seal on Sable Island, Nova Scotia, Canada," with Daryl Boness from July 19, 1999 to September 24, 1999.

Peter P. Marra, SI Postdoctoral Fellow, Dartmouth College. "Assessing Physiological Condition and Habitat Suitability in Migrant Birds During the Winter Season," with Russell Greenberg from October 1, 1998 to September 30, 1999.

Susanne McCulloch, SI Ten-week Graduate Student Fellow, University of St. Andrews, U.K. "Mother-Pup Recognition in the Grey Seal of Sable Island, Nova Scotia," with Daryl Boness from December 28, 1998 to March 5, 1999.

Kevin E. Omland, Postdoctoral Fellow in Molecular Evolution, State University of New York, Albany. "A Phylogenetic Study of the Evolution of Migration in Orioles," with Robert Fleischer and Russell Greenberg from July 15, 1999 to August 14, 2001.

Kevin E. Omland, Visiting Scientist, Duke University. "Population Genetic Structure of Common Raven (*Corvus corax*): Gene Flow and Effective Population Size at Different Spatial Scales," with Robert Fleischer from February 15, 1999 to July 14, 1999.

Gerald E. Poyo, SI Ten-week Graduate Student Fellow, George Mason University. "Noninvasive Fecal Steroid Monitoring in the Slender-Tailed Meerkat (*Suricata suri-*

*catta*)," with Steven Monfort from June 1, 1999 to August 6, 1999.

Monica Stevens-Sommer, Visiting Student, University of New Hampshire. "Movements and Spatial Patterns of Female South American Fur Seals," with Daryl Boness from October 1, 1998 to January 31, 2000.

Karyl B. Swartz, Visiting Scientist, City University of New York. "Subjective Organization of Memory," with Lisa Stevens from October 1, 1998 to May 31, 1999.

Tyson W. Walker, Visiting Student, Virginia Commonwealth University. "Allegheny Volant Mammal Project," with William McShea from May 21, 1999 to August 21, 1999.

Nadja Wielebnowski, Visiting Scientist, University of California, Davis. "Influence of the Social Environment on Adrenal Response, Ovarian Activity and Behavior in Captive Cheetahs," with Janine Brown from April 1, 1999 to December 31, 2000.

## Office of the Smithsonian Institution Archives

Michael F. Robinson, SI Predoctoral Fellow, University of Wisconsin, Madison. "Arctic Explorers and the American Scientific Community, 1850-1909," with Pamela Henson from September 1, 1999 to February 28, 2000.

## Smithsonian Astrophysical Observatory

James Robert Anglin, Visiting Scientist, Universitat Innsbruck, Austria. "The Evolution of an Open Quantum System," with Kate Kirby from September 1, 1999 to November 30, 2000.

Aldo J. Apponi, Visiting Scientist, Arizona State University. "Study of Metal-Containing Free Radicals by High Resolution Lab Spectroscopy," with Patrick Thaddeus from October 1, 1998 to September 30, 1999.

Aldo J. Apponi, Postdoctoral Fellow, Arizona State University. "Molecular Spectroscopy/Astrophysics," with Patrick Thaddeus from October 1, 1998 to October 20, 2000.

Zoltan Balog, Predoctoral Fellow, JATE University, Hungary. "Search for Pre-Main Sequence Stars in Open Clusters," with Scott Kenyon from September 1, 1999 to August 31, 2001.

Aaron J. Barth, CFA Postdoctoral Fellow, University of California, Berkeley. "Optical and Ultraviolet Studies of LINERs," with Robert Kirshner from October 1, 1998 to September 30, 2001.

Maria Beltran, Visiting Student, University of Barcelona, Spain. "Sources Driving Molecular and HH Outflows," with Paul Ho from October 1, 1998 to September 30, 1999.

Maria Beltran, Predoctoral Fellow, University of Barcelona, Spain. "Sources Driving Molecular and HH Outflows," with Paul Ho from October 1, 1998 to September 30, 2001.



- Moncef Bouledroua, Short-Term Visitor, Université d'Annaba, Algeria. "Emission and Absorption Spectra of a Gas of Sodium Atoms as a Function of Temperature and Density," with Alexander Delgarno from August 1, 1999 to December 31, 1999.
- Andrew Burdett, Visiting Student, University of Leeds, United Kingdom. "A Search for Gamma Ray-Pulsars Below 250 GeV," with Trevor Weekes from October 1, 1998 to September 30, 1999.
- Andrew Burdett, Predoctoral Fellow, University of Leeds, United Kingdom. "A Search for Gamma Ray-Pulsars Below 250 GeV," with Trevor Weekes from October 1, 1998 to September 30, 1999.
- Ilaria L. Cagnoni, Visiting Scientist, International School for Advanced Studies, ISAS-SISSA. "Brief Candles: Dwarf Galaxy AGN, Seyfert 'Companions' and Blank Field X-ray Sources," with Martin Elvis from February 1, 1999 to July 31, 1999.
- Massimo Cappi, Visiting Scientist, Translations Agency Emilia-Center, Italy. "The Study of X-ray Properties of Active Galaxies," with Martin Elvis from June 15, 1999 to December 15, 1999.
- Yang Chen, Visiting Scientist, Nanjing University, China. "X-ray Observations of Supernova Remnants and Pulsars," with Patrick Slane from September 17, 1999 to September 30, 2000.
- Finn E. Christensen, Visiting Scientist, Danish Space Research Institute. "Developing Novel X-ray Optics for Future X-ray Satellite Missions," with Paul Gorenstein from November 1, 1998 to April 30, 1999.
- Finn E. Christensen, Visiting Scientist, Danish Space Research Institute. "X-ray Optics for Future X-ray Satellite Missions," with Paul Gorenstein from November 1, 1998 to April 30, 1999.
- Kwong T. Chung, Visiting Scientist, North Carolina State University. "Photoionization and Study of Multiply-Excited Atomic Systems," with Kate Kirby from April 15, 1999 to July 15, 1999.
- Benedetta Ciardi, Predoctoral Fellow, Osservatorio Astrofisico di Arcetri, Italy. "The Physics of the First Luminous Objects," with George Field from July 1, 1999 to November 30, 1999.
- Dennis P. Clougherty, Visiting Scientist, University of Vermont. "The Quantum Effects of Atom-Surface Collisions," with Kate Kirby from September 1, 1999 to December 31, 1999.
- Charles Coldwell, Visiting Student, Harvard University. "Optical Long-baseline Stellar Interferometry," with Costas Papaliolios from January 1, 1999 to December 31, 1999.
- Maria Eugenia Contreras, Visiting Scientist, Instituto de Astronomía, UNAM, Mexico. "Cluster Survey of Protoplanetary Disk Evolution," with Lee Hartmann from August 15, 1999 to December 31, 2000.
- Elisa Costantini, Visiting Student, Osservatorio Astronomico di Bologna. "X-rays Absorption Around the Bright Galaxy M87," with Antonella Fruscione from May 1, 1999 to April 30, 2000.
- Elena Dashevskay, Short-Term Visitor, Israel Institute of Technology. "The Theory of Energy Transfer in Collisions of Atoms with Diatomic Molecules at Low Energies and Models of Vibrational and Rotational Predissociation," with Kate Kirby from July 15, 1999 to October 15, 1999.
- Shane P. Dunlea, Visiting Student, University College Dublin, Ireland. "Search for Extended TeV  $\gamma$  ray Sources," with Trevor Weekes from April 15, 1999 to July 15, 1999.
- John P. Finlay, Visiting Scientist, Purdue University. "The Upgrade and Installation of the 10 Meter Gamma Ray Telescope of the Whipple Observatory," with Trevor Weekes from August 1, 1999 to June 30, 2000.
- Ettore Flaccomio, Visiting Student, University of Palermo, Italy. "Star Formation and Activity in T Tauri Stars," with F. Rick Harnden, Jr. from September 15, 1999 to March 15, 2000.
- Carl A. Gottlieb, Visiting Scientist, Harvard University. "The Identification of Large Molecular Ions and Precise Rest Frequencies to Guide the Interpretation of Radio Astronomical Observations in Narrow Line Molecular Sources," with Patrick Thaddeus from July 1, 1999 to June 30, 2000.
- Saiyid Sirajul Hasan, Visiting Scientist, Indian Institute of Astrophysics. "Oscillations in Solar Flux Tubes," with Wolfgang Kalkofen from March 15, 1999 to July 14, 1999.
- Denise P. Hinton, Visiting Scientist, University of North Carolina, Chapel Hill. "Development of Human Lung Imaging Techniques for Lazer-Polarized  $^3\text{He}$  Gas," with Ronald Walsworth from February 1, 1999 to September 30, 2000.
- Deirdre Horan, Short-Term Visitor, University College, Dublin. "Observations of Gamma-Ray Emissions from EGRET Unidentified Sources Using the Extended Camera at the Whipple Observatory," with Trevor Weekes from January 1, 1999 to March 31, 1999.
- Verne L. Jacobs, Visiting Scientist, Naval Research Laboratory. "Kinetic Theory and Hydrodynamics Descriptions of Atomic Radiation Processes in Plasmas," with Kate Kirby from September 13, 1999 to December 31, 1999.
- John Kildea, Visiting Student, University College Dublin, Ireland. "Upgrade of Whipple 331-pixel TeV Imaging Camera to 541 Pixels," with Trevor Weekes from August 1, 1999 to December 15, 1999.
- Valentina La Parola, Visiting Student, Università di Palermo, Italy. "Diagnostic and Statistic Studies on X-ray Emissions of Normal Galaxies," with Giuseppina Fabiano from September 15, 1999 to May 15, 2000.
- Rodney D. Marks, Postdoctoral Fellow, University of South Wales, Australia. "Antarctic Submillimeter Astronomy," with Adair Lane from June 21, 1999 to November 30, 2000.
- Christopher L. Martin, Postdoctoral Fellow, University of California, Santa Barbara. "Antarctic Submillimeter Astronomy," with Adair Lane from August 1, 1999 to July 31, 2001.

- Pasquale Mazzotta, Visiting Scientist, Università di Roma "Tor Vergata", Italy. "High Resolution X-ray Spectra of Cooling Flows Systems," with William Forman from June 15, 1999 to October 31, 2001.
- Rafael Millan-Gabet, Michelson Postdoctoral Fellow, University of Massachusetts at Amherst. "The Development of Three-Beam Operation for the Infrared Optical Telescope Array (IOTA)," with Wesley Traub from August 1, 1999 to July 31, 2001.
- Barbara J. Mochejska, Short-Term Visitor, Warsaw University Observatory. "A Study of How Faint, Unresolved Stars in Nearby Galaxies Affect the Measurements of Brightness of the Cepheid Variables," with Krzysztof Stanek from July 1, 1999 to August 30, 1999.
- John D. Monnier, CfA Postdoctoral Fellow, University of California, Berkeley. "Infrared Interferometry and Spectroscopy of Circumstellar Envelopes," with Philip Myers from September 1, 1999 to August 31, 2001.
- Christopher Moore, Postdoctoral Fellow, Massachusetts Institute of Technology. "Submillimeter Wavelength Interferometry," with Paul Ho from July 15, 1999 to July 14, 2000.
- Jose Munoz, Visiting Scientist, University of Valencia, Spain. "CASTLES and a Redshift Survey of Faint Flat-spectrum Radio Sources," with Emilio Falco from October 1, 1998 to December 31, 1999.
- Jose Munoz, Visiting Scientist, University of Valencia, Spain. "CASTLES and a Redshift Survey of Faint Flat-Spectrum Radio Sources," with Emilio Falco from October 1, 1998 to December 31, 1999.
- Martin Naraschewski, Visiting Scientist, Universität München, Germany. "Nonequilibrium Phenomena in Bose Condensed Gases," with Kate Kirby from October 1, 1998 to September 30, 1999.
- Martin Naraschewski, Visiting Scientist, Universität München, Germany. "Nonequilibrium Phenomena in Bose-Einstein Condensed Gases," with Kate Kirby from October 1, 1998 to September 30, 1999.
- Kristen A. Nelson-Patel, Predoctoral Fellow, University of Rochester. "Spatial Mapping of IR PAH Feature Emission in Nearby Ultraluminous IR Galaxies," with Steven Willner from September 1, 1999 to November 30, 2001.
- Evgueni E. Nikitin, Short-Term Visitor, Israel Institute of Technology. "The Nonadiabatic Dynamics Near the Conical Intersection," with Kate Kirby from July 15, 1999 to October 15, 1999.
- Paul E.J. Nulsen, Visiting Scientist, University of Wollongong, Australia. "Structure and Evolution of Groups and Clusters of Galaxies," with Christine Jones Forman from July 11, 1999 to January 31, 2000.
- Pius N. Okeke, Visiting Scientist, University of Nigeria. "Analysis, Modeling, and Acquisition of Solar Eclipse Observations," with Shadia Habbal from May 16, 1999 to August 15, 1999.
- Maurizio Paolillo, Visiting Student, Università di Palermo, Italy. "X-ray Emission from Lenticular Galaxies and the Relation With Environment," with Giuseppina Fabbiano from September 15, 1999 to May 15, 2000.
- Emanuele Perinati, Visiting Student, Università di Palermo, Italy. "Participation in a Development Program for Microcalorimeters X-ray Detection," with Eric Silver from September 11, 1999 to May 15, 2000.
- Santina Piraino, Visiting Student, IFCAI/CNR. "Simultaneous Spectral and Timing Observations of Accreting Neutron Stars," with Philip Kaaret from January 1, 1999 to June 30, 1999.
- Nicola Pizzolato, Visiting Student, Università di Palermo, Italy. "Study of the Relation Between Stellar Evolution and Magnetic Activity in Late-Type Stars," with F. Rick Harnden, Jr. from September 15, 1999 to May 15, 2000.
- Trevor J. Ponman, Visiting Scientist, University of Birmingham, United Kingdom. "X-ray Studies of Galaxies, Groups and Clusters," with Jan Vrtilik from August 13, 1999 to December 15, 1999.
- Jonathan M. Richardson, Visiting Scientist, Science Research Laboratory. "Development of a System for Low-Field Human MRI," with Ronald Walsworth from February 1, 1999 to January 31, 2000.
- Francesca Scire-Scappuzzo, Visiting Scientist, Istituto di Informatica E Telecomunicazioni/Viale, Italy. "Multipath in High Accuracy GPS Positioning for Geodynamic Studies," with James Davis from August 15, 1999 to December 31, 1999.
- Hsien Shang, Postdoctoral Fellow, University of California, Berkeley. "A Multi-Disciplinary Study of the Origins of Sun-Like Stars and Their Planetary Components," with Paul Ho from September 1, 1999 to August 31, 2001.
- Krzysztof Z. Stanek, Hubble Postdoctoral Fellow, Princeton University. "The Metallicity Dependence of the Cepheid Period-Luminosity Relation," with Robert Kirshner from September 1, 1999 to January 1, 2001.
- Rhanna Starling, Visiting Student, University of St. Andrews. "Accretion Disks in AGN/Quasar Populations," with Aneta Siemiginowska from July 11, 1999 to January 15, 2000.
- Frank S. Tesch, Visiting Student, University of Hamburg, Germany. "Search for Large-Scale Structures in the Spatial Distribution of X-Ray Selected AGN," with Martin Elvis from January 1, 1999 to December 31, 1999.
- Frank S. Tesch, Predoctoral Fellow, University of Hamburg, Germany. "Search for Large-Scale Structures in the Spatial Distribution of X-Ray Selected AGN," with Martin Elvis from January 1, 1999 to December 31, 1999.
- Uwe Thumm, Visiting Scientist, Kansas State University. "Interactions of Ions With Clusters and Surfaces and the Photodetachment of Negative Ions," with Kate Kirby from June 1, 1999 to February 28, 2000.
- Takahiro Tsutsumi, Visiting Scientist, National Astronomical Observatory, Japan. "Multi-Frequency Study of Radio-Emitting X-Ray Binaries," with Eric Keto from April 15, 1999 to April 14, 2001.
- Amichay Vardi, Postdoctoral Fellowship, Weismann Institute of Science, Israel. "Stimulated Raman Production of Ultracold Molecules," with Kate Kirby from September 1, 1999 to August 31, 2001.

- Brad Wallace, Postdoctoral Fellow, University of Calgary, Canada. "Supernova Remnant/Molecular Cloud Interactions," with Paul Ho from August 1, 1999 to July 31, 2001.
- Sandra Ward, Visiting Scientist, University of North Texas. "Positronium Formation," with Kate Kirby from February 1, 1999 to March 31, 1999.
- Martina C. Wiedner, Visiting Scientist, Mullard Radio Astronomy Observatory. "Submillimeter Array," with Paul Ho from October 15, 1998 to October 14, 1999.
- Martina C. Wiedner, Postdoctoral Fellow, Mullard Radio Astronomy Observatory. "Testing and Calibration of the Submillimeter Array," with Paul Ho from October 15, 1998 to October 14, 2001.
- Bruno Alexander Wilson, Visiting Student, University of Bristol, United Kingdom. "Survey of the Milky Way: Observations of the Orion Molecular Clouds," with Patrick Thaddeus from January 7, 1999 to May 31, 1999.
- Suzanne F. Yelin, Visiting Scientist, Massachusetts Institute of Technology. "Nonlinear Optical Phenomena in Dense Resonant Atomic Media and Quantum Wells," with Kate Kirby from September 16, 1999 to September 15, 2001.

## Smithsonian Center for Latino Initiatives

- Dennis R. Hidalgo, Predoctoral Fellow, Central Michigan and Strathclyde Universities. "Envoys of a New Empire?: Two Protestant Communities in the Late 19th and Early 20th Century Spanish Caribbean," with Miguel Bretos and Marvette Perez from August 15, 1999 to June 14, 2000.

## Smithsonian Center for Materials Research and Education

- Joanne Boyer, Postgraduate Conservation Intern, Queens University. "Conservation Internship," with Donald Williams from October 1, 1998 to September 30, 1999.
- Angel D. Santiago-Torres, Senior Fellow, Museo de Arte de Ponce. "Analysis of Materials and Techniques in Puerto Rican Santos (Identification of Tropical Woods of Puerto Rico Used by the Puerto Rican Artisans)," with Donald Williams from July 1, 1999 to September 30, 1999.
- Mary Studt, Postgraduate Conservation Intern, Buffalo State College. "Conservation Internship," with Donald Williams from October 1, 1998 to May 31, 2000.

## Smithsonian Environmental Research Center

- Christine Chui, Visiting Student, Yale University. "How *Vibrio cholerae* Numbers Are Affected by Copepod

- Species, Phytoplankton Species, and the Temperature and Salinity in which they live," with Gregory Ruiz from May 31, 1999 to August 20, 1999.
- Cathleen A. Coss, Visiting Student, University of Maryland. "'Perkinsus' spp. Infection of 'Macoma balthica' Clams," with Gregory Ruiz from June 7, 1999 to August 27, 1999.
- Jeffrey A. Crooks, SI Postdoctoral Fellow, University of California, San Diego. "The Effects of Habitat-Altering Exotic Species in Chesapeake and San Francisco Bays," with Gregory Ruiz from January 15, 1999 to January 14, 2000.
- John R. Dolan, SI Senior Fellow, Centre National de la Recherche Scientifique, France. "Planktonic Mixotrophs in a Eutrophic Estuary," with Charles Gallegos and D. Wayne Coats from August 1, 1999 to July 31, 2000.
- Makihiko Ikegami, Visiting Student, Utrecht University. "Controls for Division of Function and Labour in *Scirpus Olneyi*, A Clonal Intertidal Wetland Species," with Marinus Werger and Dennis Whigham from April 15, 1999 to April 14, 2001.
- Jill M. Juhasz, Visiting Student, Northeastern University. "Domestic Ballast Water Transport: A Potential Aid in the Transfer of Nonindigenous Aquatic Species," with Gregory Ruiz from June 15, 1999 to September 15, 1999.
- Jiahong Li, SI Postdoctoral Fellow, Chinese Academy of Sciences. "Photosynthetic Acclimation to Elevated Atmospheric CO<sub>2</sub> as Affected by the Time of Day in the Florida Scrub-Oak Species," with Bert Drake from June 1, 1999 to November 30, 1999.
- Romuald N. Lipcius, SI Senior Fellow, College of William and Mary. "Source-Sink Dynamics in a Marine Bivalve," with Anson Hines and Gregory Ruiz from September 1, 1999 to December 31, 1999.
- Elena G. Litchman, SI Postdoctoral Fellow, University of Minnesota. "Effects of Dynamic Ultraviolet Radiation Regimes on Phytoplankton," with Patrick Neale from January 15, 1999 to March 14, 2000.
- Anne S. Marsh, Visiting Scientist, Yale University. "Rising CO<sub>2</sub> and Long-Term Carbon Storage in Terrestrial Ecosystems: An Empirical Carbon Budget Validation," with Bert Drake from January 1, 1999 to December 31, 1999.
- Melissa K. McCormick, SI Postdoctoral Fellow, Michigan State University. "The Effect of Orchid Specificity on Abiotic and Mycorrhizal Heterogeneity," with Dennis Whigham from July 1, 1999 to June 30, 2000.
- Matthew Nicklin, Visiting Student, Northeastern University. "Patterns of Domestic Ballast Water Transport in New England," with Gregory Ruiz from January 1, 1999 to June 15, 1999.
- Vladimir A. Samarkin, SI Senior Fellow, Russian Academy of Sciences. "Methane Biogeochemistry in Wetlands of the Nanticoke River Watershed," with Thomas Jordan from July 1, 1999 to June 30, 2000.
- Evonne P.Y. Tang, SI Postdoctoral Fellow, Universite Laval, Canada. "Spectral Response of Rhode River Phytoplankton to Visible Light," with Patrick Neale from September 1, 1999 to August 31, 2000.

- Helen C. Thompson, SI Ten-week Graduate Student Fellow, Rutgers University. "Influence of the Light Environment on the Growth of Native and Exotic Vines," with Dennis Whigham from June 1, 1999 to August 6, 1999.
- Heather Turner, Visiting Student, North Carolina State University. "Migration Dynamics of Female Blue Crabs in the Chesapeake Bay: Timing and Energetics," with Anson Hines from May 17, 1999 to December 24, 1999.
- William C. Walton, SI Predoctoral Fellow, University of Maryland. "Mitigation of the Effects of a Nonindigenous Pest; The Green Crab's Effect on the Recovery of the Hard Clam Fishery on Martha's Vineyard, MA (USA)," with Gregory Ruiz and Anson Hines from June 1, 1999 to May 31, 2000.
- Jane Wasley, SI Predoctoral Fellow, University of Wollongong, Australia. "Comparative Bryophyte Eco-Physiology," with Catherine Lovelock from June 15, 1999 to September 14, 1999.
- Marinus J.A. Werger, Mellon Senior Fellow, "Testing the Genetic Significance of Division of Labour: A Recently Identified Ecological Strategy in Clonal Plants," with Dennis Whigham from October 1, 1998 to March 31, 2002.
- Wonho Yih, Visiting Scientist, Kunsan National University, Korea. "Measurement of Any Reduced 14C Primary Productivity of the Synchronously Infected Hosts of *Gymnodinium sanguineum*," with D. Wayne Coats from January 1, 1999 to June 30, 1999.

## Smithsonian Institution Affiliates

- Martha Gutierrez-Steinkamp, Fellow in Museum Practice, Ft. Lauderdale, Florida. "The Development of Participatory Community Outreach Programs and Exhibits in Culturally Diverse Communities," with Margaret Pulles and Michael Carrigan from June 1, 1999 to March 31, 2000.

## Smithsonian Institution Libraries

- John R. Short, Dibner Library Resident Scholar, Syracuse University. "From Cosmology to Geography," with William Baxter from May 1, 1999 to August 30, 1999.

## Smithsonian Marine Station at Fort Pierce

- Kevin Brett Johnson, Visiting Scientist, University of Oregon. "The Interplay Between the Length of Larval Life and Size at Metamorphosis in Marine Invertebrates," with Mary Rice from October 1, 1998 to September 30, 1999.
- Bruno Pernet, Visiting Scientist, University of Washington. "Functional Morphology and Evolution of Larval Feeding

in Phyllococidan Polychaetes," with Mary Rice from September 15, 1999 to September 14, 2000.

## Smithsonian Tropical Research Institute

- Josephine Babin, Short-term Visitor, Louisiana State University. "Avian Contact Zones and Speciation on the Isthmus of Panama," with Eldredge Bermingham from January 1, 1999 to March 31, 1999.
- Carina Barth, Short-term Visitor, University of Duesseldorf, Germany. "Photoinactivation of Photosystem I in Comparison with Photosystem II in Sun and Shade Leaves of Tropical Plants," with Klaus Winter from November 1, 1998 to January 31, 1999.
- Michael J. Blum, Short-term Visitor, Duke University. "The Evolution Genetics of 'Ileliconius erato'," with Eldredge Bermingham from August 1, 1999 to October 30, 1999.
- Roberto Cordero, Visiting Scientist, Virginia Polytechnic Institute and State University. "Integrating Canopy and Hydraulic Architecture of Psychotria spp Shrubs Across Gradients of Light and Moisture Availability," with S. Joseph Wright from August 15, 1999 to August 15, 2001.
- Matthew H. Dick, SI Postdoctoral Fellow, Yale University. "Molecular Phylogeny of Tropical American Cupuladriid Bryozoans," with Jeremy Jackson and Nancy Knowlton from September 1, 1999 to June 30, 2000.
- Ana I. Fernandez-Perdices, Visiting Scientist, Centro Universitario Complutense. "Models of Colonization in Freshwater Fishes in Northern Central America," with Eldredge Bermingham from September 1, 1999 to August 31, 2001.
- Nico Franz, Short-term Visitor, Universidad de Costa Rica. "Biological Consequences of Cognitive Skills: Foraging Success in 'Ectatomma ruidum' and 'Ectatomma tuberculatum'," with William Wcislo from May 5, 1999 to August 5, 1999.
- Mateo Garrido, Short-term Visitor, Universidad de Las Palmas de Gran Canaria, Spain. "Comparacion de la Variabilidad del AND Mitocondrial Entre Las Poblaciones de 'Diadema antillarum' del Caribe y la Macaronesia," with Harilaos Lessios from February 1, 1999 to April 30, 1999.
- Hans H. Gehrig, Visiting Scientist, Technical University Darmstadt, Germany. "Analysis of the Evolution of CAM Plants using DNA Microarray Technology," with John Cushman and Klaus Winter from September 1, 1999 to August 31, 2001.
- Deirdre C. Gonsalves-Jackson, SI Predoctoral Fellow, Florida Institute of Technology. "Biogeographic Effects on Opisthobranch Mollusc Developmental Patterns: Systematics and Trans-Panamic Distribution of Developmental Types," with Harilaos Lessios from September 15, 1999 to June 30, 2000.
- James Guest, Short-term Visitor, University of Newcastle. "Comparative Histo-pathology of the Band Diseases of

- Tropical Reef Building Corals," with Hector Guzman from October 1, 1998 to December 31, 1998.
- Andrew Kern, Short-term Visitor, Brown University. "Taxon Cycles of the Lesser Antillean Avifauna," with Eldredge Bermingham from August 30, 1999 to November 30, 1999.
- Carmi Korine, Visiting Scientist, Institute of Technology, Israel. "The Affect of Growth Form and Life History Traits on Plant Allometry in a Lowland Tropical Forest," with S. Joseph Wright from May 1, 1999 to October 31, 1999.
- Margaret B. Kraenzel, Short-term Visitor, McGill University, Canada. "Carbon Sequestration by Afforestation of Abandoned Agricultural Land by Teak Plantations in Panama," with Catherine Potvin from June 1, 1999 to August 31, 1999.
- Scott Mangan, Short-term Visitor, University of Wisconsin, Oshkosh. "Do Spores of Arbuscular Mycorrhizal Fungi Isolated from Scats of 'Proechimys semispinosus' Cause Differential Growth Responses in Tropical Tree Seedlings?" with E. Allan Herre from July 1, 1999 to September 30, 1999.
- Juan L. Mate, Visiting Student, University of Miami. "Geographic, Ecological, Genetic and Morphological Variation in 'Pavona' (Cnidaria, Anthozoa) Along the Pacific Coast of Panama," with Nancy Knowlton and Hector Guzman; Luis D'Croz from January 1, 1999 to December 31, 1999.
- Amy Moran, Short-term Visitor, University of Washington. "Egg Size Evolution and Life History Divergence of Tropical American Arcid Bivalves," with Harilaos Lessios from October 1, 1998 to December 31, 1998.
- Geoffrey Morse, Short-term Visitor, Harvard University. "Novel Use in Seed Beetle (Bruchidae: Stator) Lineages: Diet Expansion Versus Host-Mediated Speciation," with Donald Windsor from March 25, 1999 to June 25, 1999.
- Georges A. Pearson, SI Ten-week Graduate Student Fellow, University of Kansas. "North and South American Pale-  
oindian Expansions and Interactions Across the Panamanian Doorway," with Richard Cooke from January 4, 1999 to March 12, 1999.
- Steven M. Phelps, SI Postdoctoral Fellow, University of Texas. "Categorization and Cognition in the Tungara Frog," with A. Stanley Rand and Michael Ryan from June 1, 1999 to January 31, 2000.
- Simon Pierce, Visiting Scientist, University of Durham, United Kingdom. "Photosynthetic Pathways in the Bromeliaceae in Panama: Relations Between Lifeforms, Exposure within the Canopy, Gene Expression and Capacity to Tolerate Light and Water Stress," with Howard Griffiths and Klaus Winter from February 1, 1999 to January 31, 2001.
- Denise S. Pope, SI Postdoctoral Fellow, Duke University. "Signal Detection Theory and the Structure of Fiddler Crab Displays," with John Christy from November 15, 1998 to May 14, 2000.
- Oris I. Sanjur, SI Postdoctoral Fellow, Rutgers University. "Genetic Diversity on Natural Populations of 'Cucurbita' Species," with Dolores Piperno and Harilaos Lessios from June 1, 1999 to May 31, 2000.
- Sunshine A. Van Bael, Short-term Visitor, University of Illinois, Urbana-Champaign. "Trophic Interactions in Wet and Dry Forests," with S. Joseph Wright from April 15, 1999 to July 15, 1999.
- Elizabeth Wehncke, Short-term Visitor, Universidad de Buenos Aires, Argentina. "Postdispersal Seed Fate and Consequences of Seed Dispersal Patterns by 'Cebus capucinus' in a Tropical Forest," with James Dalling from February 1, 1999 to April 30, 1999.
- Suzanne Williams, Visiting Scientist, James Cook University, Australia. "Using Nuclear Markers to Test for Concordance in Transisthmian Snapping Shrimp," with Nancy Knowlton from December 1, 1998 to November 30, 2000.

## Smithsonian Interns in Fiscal Year 1999

The Smithsonian offers internships and other special appointments to undergraduate and graduate students and to museum professionals. The home institution, a brief description of the project undertaken at the Smithsonian, and the dates of service are given wherever possible.

### Accessibility

Celine Lalanne	BA Candidate	Hogskolan Dalarna	3/25/1999 to 4/22/1999
Guide about accessible museums for visually impaired and blind visitors.			

### Anacostia Museum and Center for African American History and Culture

Rayna Smith	BA Candidate	Howard University	9/16/1999 to 12/31/1999
Working under Deb Willis, curator of the African American History and Culture exhibits.			

### Architectural History and Historic Preservation

Joshua Barkan	BA	University of Arizona	4/12/1999 to 6/18/1999
Research on Adolf Cluss, and the Arts and Industries Building, looking primarily at European influences, during 1847 in Paris and Brussels.			

Megan Masana	MA Candidate	Savannah College of Art and Design	9/8/1999 to 11/30/1999
	Will create an annotated catalog of all buildings by Adolf Cluss, the 19th-century architect of the Arts and Industries Building.		
Scott Meacham	BA	Dartmouth College	1/9/1999 to 6/15/1999
	Assisting with the development of a conference on masonry conservation.		
Kiyoko Yamaguchi	BA	University of California –Berkeley	1/4/1999 to 1/29/1999
	Research on Junzo Yoshimura, an architect who was involved in designing Smithsonian landscape.		

### *Archives of American Art*

Matthew Adams	BA Candidate	Clark University	7/26/1999 to 8/20/1999
	To assist with the preparation of the <i>Archives of American Art Journal</i> .		
Kathleen Davies	BA Candidate	San Jose State University	6/7/1999 to 8/13/1999
	Help prepare for publication a guide to the papers of Asian American and Asian artists at the Archives of American Art.		
Richard Kelly	MA Candidate	George Washington University	6/14/1999 to 7/30/1999
	Training in the use and organization of primary and archival source material.		
Angela Lowe	BA Candidate	Brigham Young University	9/12/1999 to 12/15/1999
	Research on an American artist that will contribute to an exhibition in New York.		

### *Arthur M. Sackler Gallery/Freer Gallery of Art*

Anastasia Ahn	MA	Ewha W. University	10/1/1998 to 4/25/1999
	Assist in developing program for <i>ImaginAsia</i> , and assist in running <i>ImaginAsia</i> program.		
Omar Aziz	High School Degree Candidate	Robert E. Lee High School	6/13/1999 to 8/30/1999
	Helping children better understand and be aware of Asian Cultures through projects as well as the artistic booklets put together by interns at the Sackler.		
Tim Bean	BA	Lehigh University	1/11/1999 to 7/1/1999
	Graphic design in the <i>ImaginAsia</i> department and Photography department.		
Lauren Bronson	BA	George Mason University	9/9/1999 to 12/31/1999
	Assist with <i>ImaginAsia</i> .		
HyoJung Cho	MA Candidate	George Washington University	7/8/1999 to 8/23/1999
	Children's education program.		
Serena Li	High School Degree Candidate	Winston Churchill High School	7/1/1999 to 8/13/1999
	Work on shop Web site; expand and improve this e-commerce Web site.		
Miwa Ohama	BA Candidate	George Washington University	1/9/1999 to 6/30/1999
	<i>ImaginAsia</i> Program; Working with art sessions for children ages 6–12 and their adults. In the sessions, activity guides enable children to explore exhibition and to produce their own works of art in the classroom.		
Sarah Perez-Silverman	BA Candidate	University of California –Santa Cruz	9/12/1999 to 12/3/1999
	<i>ImaginAsia</i> is an educational program for families with young children. I will be planning guided tours and activities that accompany exhibits within the museum.		

Claudia Rice	AA Candidate	Montgomery College	1/19/1999 to 5/31/1999
	Transferring and entering files from binders to computer and cataloging art from the ninth century to the present for both the Freer and Sackler Islamic Near Eastern Art Collection.		
Doler Shah	BA	JJ School of Arts	6/15/1999 to 8/30/1999
	Helping with general design functions and graphics.		
Lori Spiering	BA Candidate	Hood College	1/25/1999 to 5/16/1999
	Working to further develop and structure <i>ImaginAsia</i> through the development of classroom guides and additional programming.		
Shinako Yamashiro		George Washington University	1/11/1999 to 6/30/1999
	Working in the <i>ImaginAsia</i> program with children and their adult companions at AMMSG. Activity guides enable participants to explore an exhibition and bring new ideas and information back to the classroom and produce their own works of art.		
Jing Zeng	HS	Montgomery Blair High School	7/1/1999 to 8/13/1999
	The intern will work with the digital media workstation. She will scan, organize, and catalogue slides of exhibition installations, and architectural details of the Freer and Sackler Galleries of Art.		

### *Asian/Pacific American Studies*

Julianna Lee	BA	Wellesley College	6/15/1999 to 3/15/2000
	Research fellow for Dr. Franklin Odo in the Asian Pacific American Studies Program.		
Charlotte Lee	BA Candidate	University of California –Berkeley	6/7/1999 to 8/13/1999
	Assisting Dr. Odo in research topics related to Asian Pacific American History.		
Raina Lee	BA Candidate	University of California–Davis	4/5/1999 to 6/30/1999
	Interning with Franklin Odo's office, working with Asian Pacific American programs.		
Yuka Ohra	BA Candidate	Davidson College	5/19/1999 to 8/31/1999
	Assist Asian Pacific American Studies program with their "Bento to Mixed Plate" exhibition.		
Dominica Tolentino	MA Candidate	George Washington University	1/26/1999 to 5/16/1999
	Intern will work on strategic planning for the Asian Pacific American Studies Program, organization of workshop for Association of Asian American Studies, and public programming and special events for the "Bento to Mixed Plate" exhibition.		

### *Center for Folklife and Cultural Heritage*

Rebekah Adkisson	MA Candidate	George Washington University	9/21/1999 to 12/21/1999
	Working for Conservancy of Tibetan Art and Culture and the Smithsonian Folklife Festival. Responsibilities include administration and fund-raising aspects of the project.		
Scott Bartlett	BA Candidate	Washington State University	6/1/1999 to 7/30/1999
	Work on production, marketing of Smithsonian Folkways Recordings. Assist in encoding digital files for Web presentation.		
Christian Becker		Edmund-Siemers-Universitat Hamburg	9/14/1999 to 12/10/1999
Lee Bryars	BA	University of the South	6/2/1999 to 8/6/1999
	Sound Archives at the Smithsonian Folkways and fieldwork at the Folklife Festival		
Andy Buckman	BA Candidate	Purdue University	5/24/1999 to 7/10/1999
	Working on Folklife Festival Design and preparation, including newsletters, bulletins, and festival sites.		

Maria Elena Cepeda	Doctoral Degree Candidate Intern for Volunteer Staff; Supervisor for United Nations Educational, Scientific and Cultural Organisation (UNESCO) Aides.	University of Michigan	5/24/1999 to 7/30/1999
Ronald Chacon	AA Candidate	Montgomery College	12/7/1998 to 4/30/1999
Joys Cheung	MA	University of Texas—Austin	9/15/1999 to 9/13/2000
Tracy Clonts	Folklife and Cultural Studies. History of folklife studies.		9/9/1999 to 12/3/1999
Brenna Dailey	BA Candidate Design.	Rhodes College	6/1/1999 to 8/15/1999
Ynske De Bruyne	BA Candidate Research projects with Dr. Kurin.	University of Ghent	9/1/1999 to 9/27/1999
Dustin Edge	BA Candidate Working with archival materials in the Center for Folklife and Cultural Heritage.	Davidson College	7/19/1999 to 8/20/1999
Scott Finholm	Mastering and cataloging a series of recordings for Folkways.		11/23/1998 to 4/15/1999
Hadi Gharabaghi	AA Candidate Provide assistance in filming and editing numerous video projects.	Montgomery College	9/9/1999 to 12/15/1999
Helen Gillet	BA Candidate Working with Doran's office and with Folklife Festival coordinator for 2 weeks of festival.	Beloit College	6/14/1999 to 7/30/1999
Anna Gray	BA	Sydney University	9/20/1999 to 10/22/1999
Kusum Harchandrai	BA Candidate Photography and Web work for Folklife Festival.	St. Olaf College	6/1/1999 to 8/30/1999
Catherine Hardman	MA Candidate Archival organization of Ralph Rinzler's papers.	Catholic University of America	5/17/1999 to 8/31/1999
Romain Haug	MA	Universite de Montreal	9/20/1999 to 12/20/1999
Vincente Alfredo Herrera	Intern for production of Latin American Youth Center's Latino Heritage Center Exhibit.		11/23/1998 to 4/30/1999
Darrol Hughes	To see what anthropologists actually do, and to get a better understanding of ethnographic film—from the concept through post-production.		2/1/1999 to 7/31/1999
Robert Jansen	BA Coordinating participants and assisting program staff at the Romanian Folklife Festival.	Linfield College	6/10/1999 to 7/9/1999
Kimberly Junod	BA Candidate Complete the radio publicity campaign for the release of Taquachito Nights, and research and make contacts in the high school music education market to help further ties between teachers and Smithsonian Folkways.	University of Pennsylvania	6/1/1999 to 9/7/1999
Marni Kravitz	BA Year 2000 Folklife Festival.	Georgetown University	2/1/1999 to 2/1/2000
Mary Lloyd	PhD Candidate To design educational programs for children related to the summer Folklife Festival and review curriculum on African Immigrants in D.C. area.	Seattle University	3/1/1999 to 3/28/1999



Lisa Maiorino	BA	Indiana University	4/12/1999 to 7/31/1999
	Assist in organization of United Nations Educational, Scientific and Cultural Organisation (UNESCO) conference.		
Teresa Martyny	BA Candidate	University of Florida	1/6/1999 to 7/10/1999
	Production Assistant on music project. Assist the executive producers on the production of a Folkways CD and the production and curation of a related exhibit and Web site.		
Jonathan McCollum	MA Candidate	Tufts University	6/7/1999 to 7/29/1999
	Assist Tony Seeger with Folklife Recordings and deal with Folklife Programs and Conferences.		
Monica McTyre	BA Candidate	George Mason University	11/13/1998 to 7/31/1999
	Festival Assistant for Rio Grande/Rio Bravo Basin Exhibit for American Folklife Festival 1999.		
Kevin Miller	BA	University of Florida	5/17/1999 to 9/30/1999
	Assist Folkways staff in a variety of ways with the overall goal of getting the music to the people: a quality product distributed in the most expedient fashion possible. Includes editing liner notes, composing PowerPoint projects, and general office work.		
Amy Morros	MA Candidate	American University	9/9/1999 to 12/31/1999
	Working on New York City 2001 Folklife exhibition.		
Versha Munshi	BA Candidate	University of Chicago	6/14/1999 to 8/30/1999
	Creation of survey for Folklife Festival, supervision of volunteers who are going to administer survey and analysis of results.		
Clara Odell	High School Degree Candidate	McLean High School	6/23/1999 to 8/30/1999
	Helping with recordings; learning how Folkways are put together.		
Clinton Olive II	PhD Candidate	University of Texas–Arlington	10/5/1998 to 5/15/1999
	Compiling and organizing information for the African Immigrant Folklife Web site, as well as providing assistance with African Immigrant Folklife projects.		
Amber Papini	BA Candidate	University of Missouri –Kansas City	6/1/1999 to 7/23/1999
	Providing support in several offices, focusing on finances and administration in Folkways.		
Sarah L. Pestle	BA Candidate	Harvard University	1/19/1999 to 4/16/1999
	Compile booklet for Smithsonian Folklife Festival participants to familiarize themselves with festival venues, surroundings, and daily logistics on the National Mall; assist festival director with administrative duties.		
Matthew Pistono	MA Candidate	School of Oriental and African Studies	8/2/1999 to 10/1/2000
	Working on the year 2000 Folklife Festival, particularly on the Tibetan Culture, “Beyond the Land of Snows,” component.		
Kendra Portier	BA Candidate	Ohio State University	6/14/1999 to 7/31/1999
	Photography for Folklife Festival, archival work.		
Kishanna Poteat	BA	Clark Atlanta University	6/7/1999 to 8/13/1999
	Assisting curators and program coordinator in South African Project; reorganizing African immigrant archival collections; transcribing fieldwork interviews and narrative sessions from African Immigrant Project/Program.		
Chad Redwing	BA	Arizona State University	6/1/1999 to 7/31/1999
	Working on a conference with United Nations Educational, Scientific and Cultural Organisation (UNESCO) concerning the global protection of traditional cultures.		

Viktoría Rill	BA Candidate Assisting Kevin Doran in Folkways Recordings, and also helping with music for Folklife Festival.	University of Dayton	6/7/1999 to 8/13/1999
Mary Rogers	BA Candidate I will be working with the assistant archivist and the Folklife Festival.	West Virginia University	5/19/1999 to 8/30/1999
Matt Sandate	BA Candidate I will be working in the Folkways Recordings Department.	University of North Texas	5/24/1999 to 7/24/1999
Katrien Sonnevile	BA Candidate Research projects with Dr. Kurin.	University of Ghent	9/1/1999 to 9/27/1999
Meghan Steed	BA Candidate Participant staff, responsible for logistical arrangements for festival participants.	Hamilton College	5/27/1999 to 7/16/1999
Andrew Sternberg	BA Production of Folkways recordings.	University of Iowa	9/9/1999 to 1/31/2000
Simona Supekar	BA Candidate Working on publicity of the annual Folklife Festival.	Oberlin College	6/7/1999 to 9/1/1999
Sarah Swain	BA Candidate Assist with production and presentation of New Hampshire Program at the 1999 Smithsonian Folklife Festival.	University of New Hampshire	6/7/1999 to 8/1/1999
Tania Tam	BA Candidate Will be working with the Folklife Festival, South Africa exhibit: overseeing Narration stage and music/performance stage.	Northwestern University	6/14/1999 to 8/13/1999
Sabra Thorner	BA Candidate Interning for the Center for Folklife; facilitating the South Africa section of the Folklife Festival.	Georgetown University	5/12/1999 to 7/4/1999
Michael Twitty	BA Candidate Working with the African Immigrant Folklife Study, observing and assisting registrars and conservators. The second component of the internship is with the Tesfay Museum, where the intern will conduct an inventory of the museum's collections from Ethiopia, and identify and record the collection's conservation needs.	Howard University	6/8/1999 to 3/17/2000
Nilda Villalta	PhD Candidate Following up and planning educational programs and activities related to the exhibit, "Our voices in Washington, D.C." in three programs: art and oral history, radio and occupational history.	University of Maryland —College Park	6/7/1999 to 3/17/2000
Lauren Weintraub	BA Candidate Working on the Folklife Festival in recording, documentation; and in the Archives doing data entry, etc.	Wesleyan University	6/2/1999 to 8/30/1999
Elizabeth Weissenborn	BA Candidate The New Hampshire Program of the Smithsonian Folklife Festival.	College of Wooster	5/17/1999 to 7/16/1999

### *Center for Latino Initiatives (CLI)*

Marianne Bueno	MA Candidate Research and archival work on Chicanas, Mexican Americans, and Latina/os.	University of Texas —San Antonio	6/7/1999 to 8/13/1999
Gina Diaz	BA Candidate Assist with overall programming for the Latino Graduate Seminar, "Interpreting Latino Cultures."	University of California —Santa Cruz	4/5/1999 to 6/11/1999

Daniel Holland	BA	University of Washington	7/14/1999 to 9/24/1999
	Exhibition assistant to the Center for Latino Initiatives for "Transculturations: Fernando Ortiz' Los Instrumentos de la misila afrocubana and the Howard Family Collection of Percussion Instruments."		
<i>Center for Museum Studies (CMS)</i>			
Shirley Brockett	AA Candidate	Montgomery College	6/10/1999 to 8/30/1999
	Establish a database on museum training.		
Jamie Canavan	BA Candidate	Bennington College	1/4/1999 to 2/5/1999
<i>Hirshhorn Museum and Sculpture Garden</i>			
Sherri Chambers	BA Candidate	State University of New York—Purchase	6/4/1999 to 9/16/1999
	Working on the design for the Directions—Sam Taylor Wood exhibit opening in July 1999, helping with installation of works in the museum, and working on the "Regarding Beauty" exhibition, opening October 1999.		
Amy Crabtree	BA	College of Charleston	6/7/1999 to 8/27/1999
	Assist sculpture conservator with maintenance of all outdoor sculptures on plaza and sculpture garden. Work will include detergent washing, surface coatings application, and structural repairs. Intern will write professional "treatment" reports on computer and supplement reports with photographic documentation.		
Rebecca Crumley	BA Candidate	Virginia Commonwealth University	6/7/1999 to 8/13/1999
	Doing slide work of the permanent collection, rights and reproduction.		
Jennifer DePrizio	MA Candidate	George Washington University	1/11/1999 to 7/30/1999
	Educational Resource Packet for exhibition "Regarding Beauty" at Hirshhorn Museum and Sculpture Garden. Facilitating collaboration with Freer/Sackler and African Art about resource packet and teacher workshop.		
Emily Farrell	BA	Smith College	6/14/1999 to 8/20/1999
Sarah Finlay	MA Candidate	George Washington University	5/12/1999 to 1/31/2000
	To assist in the planning and implementation of several upcoming exhibitions at the Hirshhorn.		
Rosanna Flouty	MA Candidate	Emory University	10/7/1998 to 3/31/1999
	Help coordinate a writer's workshop in conjunction with Chuck Close exhibition, and give museum tours concentrating on the contemporary collections.		
Amy Hunter	BA	Connecticut College	9/7/1999 to 12/31/1999
	Will be involved with research for exhibition planned for March 2000. Other activities will include coordinating writers' materials and luncheon for workshop.		
Ashlinn Killeen	High School Degree Candidate	Madeira School	9/22/1999 to 6/30/2000
	Providing support for docent program.		
Eva McGovern	BA Candidate	Nottingham University	6/24/1999 to 8/24/1999
	Cataloguing works and deaccessioning.		
Nathalie Mikiszko	MA Candidate	University of Montreal	6/7/1999 to 8/13/1999
	Working with the curator of sculpture doing research for future exhibitions.		
Marija Nelson	BA Candidate	University of California—Santa Cruz	9/16/1999 to 12/15/1999
	Working in collections, cataloging in Directions gallery.		

Susan Novak	BA Candidate Assisting Associate Curator Phyllis Rosenzweig with preparations for exhibits, exhibition proposals, research, etc.	Swarthmore College	6/14/1999 to 8/13/1999
Cira Pascual-Marquina	BA Candidate Will assist Valerie Fletcher, Curator of Sculpture, with research, keeping curatorial files updated, and other duties.	Indiana University	1/11/1999 to 6/30/1999
Natalie Phillips	BA Candidate	University of the Pacific	6/7/1999 to 8/13/1999
Jill Pihlaja	MA Candidate Sculpture Garden Tours, professional research on Leonardo Drew, development of Writer's Workshop on the subject of "beauty," Thursday night (special events) supervisor, development of college luncheon.	University of the Arts	6/4/1999 to 8/13/1999
Amy Sung	BA Candidate Assisting in researching and installation of Ed Ruscha exhibition. Also, I will be helping to install Robert Gober exhibition.	Georgetown University	9/13/1999 to 12/31/1999
Allyson Taylor	AA Candidate Assist conservator with annual maintenance of outdoor sculpture. Includes detergent washing, application of protective surface coatings, repainting, and structural repairs. Intern to write professional-style conservation reports for all treatments. Reports will be supplemented by photographic documentation. Some treatments will include indoor sculpture.	Northern Virginia Community College	6/7/1999 to 8/27/1999
Melanie Weeks	Research for permanent collection and for the anniversary exhibition "Regarding Beauty."		10/28/1998 to 4/15/1999
Bethany Wolf	MA Candidate	Leicester University	1/11/1999 to 5/31/1999

### *Horticulture Services Division*

Graceann Caffio	USDA Graduate School Butterfly Habitat Garden; maintaining proper conditions for the plant and butterfly habitats, while observing the seasonal changes in butterfly populations and their life in the habitats.		5/17/1999 to 9/3/1999
Zachary Deluca	BA Candidate Intern will work with the Interior Plant Program, maintaining tropical and seasonal flowering plants inside the museums, including watering, grooming, checking for pests and diseases. Will assist with the rotation of plants to and from the greenhouse to keep displays looking fresh.	Pennsylvania State University	5/17/1999 to 8/13/1999
Annie Donnelly	BA Candidate Assist the Entomologists with the development and implementation of the Integrated Pest Management Program, including identification of key pests; plants and their location; monitoring for early detection of problems; decision making on the need for control measures; development of a management strategy; and evaluation of the effectiveness of the program.	University of Maryland —College Park	9/7/1999 to 12/24/1999
Brandy Jones	BA Candidate Work with the horticulturists and gardeners in maintaining the Folger Rose Garden. This includes watering, weeding, fertilizing, pruning, dead-heading, and identifying and controlling pests and diseases. May also have the opportunity to work with botanical nomenclature by preparing text for labels.	Cornell University	6/7/1999 to 8/20/1999
Heewon Lee	Intern will work with the artifact collection of garden furnishings, plant stands, Edwardian cases, posy holders, and floriculture memorabilia. Intern will conduct primary research in order to de-	George Washington University	1/11/1999 to 3/26/1999

velop exhibit concepts and label text in coordination with lists of objects, plants, and design that could comprise the exhibit.

- Miles Lepping BA Candidate University of Maryland 6/7/1999 to 8/20/1999  
–College Park  
Work with the Integrated Pest Management Program. Learn to identify and manage pest problems of ornamental plants and turf. Will also conduct research on the development of alternative, non-chemical pest control tactics.
- Nancy McCloskey AA Candidate Montgomery College 6/1/1999 to 8/27/1999  
Intern will work with the Integrated Pest Management Program to study and analyze insects, diseases, nematodes, and physiological problems on garden plants and to work with pest and garden management techniques.
- Lisa McDonald BA Candidate Texas A&M University 6/1/1999 to 8/20/1999  
Working in the greenhouses assisting in cultivation techniques, watering, weeding, grooming, pest control, fertilizing and the general care of plants.
- Jennifer Park BA Candidate Oregon State University 6/21/1999 to 9/17/1999  
Intern will work with the horticulturists and gardeners in maintaining the Enid A. Haupt Garden. This includes watering, weeding, fertilizing, grooming, and identifying and controlling pests and diseases on annuals, perennials, shrubs, and mixed plantings in urns and baskets. The intern will also have the opportunity to cultivate roses, formal parterres, and tropical plants in an outdoor setting.
- Irina Poloumienko BA University of Guelph 5/10/1999 to 8/13/1999  
Horticulture internship focusing on extension of Smithsonian Butterfly Garden.
- Kirsten Scott MA Colorado State University 8/9/1999 to 11/26/1999  
Review and revise the Horticulture Services Division series of Fact Sheets. Also be developing the text for the 2000 Orchid Show. Intern will work with the Chief, Horticulture Services Division, to prepare the text for the brochure to go with the Folger Rose Garden.
- Hannah Sears BA Reed College 11/9/1998 to 6/30/1999  
Intern will work with all aspects of the Orchid Collection. She will work with cultivation, recording growth and flowering habit, identification, verifying nomenclature, inventory and label production, and installation.

### *National Air and Space Museum*

- Megan Bradley BA Candidate University of Chicago 6/21/1999 to 8/27/1999  
Research on nuclear facilities in the United States during the space race for the Department of Space History.
- Jose Cervoni BA Candidate University of Maryland 6/1/1999 to 8/6/1999  
–College Park  
The external preparation and polishing of aft fuselage section of the *Enola Gay*.
- Yahmina Crews High School Degree Candidate Madeira School 9/29/1999 to 5/31/2000  
“How Things Fly” Gallery.
- Angelica Daneo BA Candidate University of Turin 8/2/1999 to 10/15/1999  
Working with the National Air and Space Museum Archive, which has many works of art that need to be checked in order to properly place them. Will work with the National Museum of American Art on the upcoming exhibition concerning Edward Hopper.
- Jennifer DiCapua BA Candidate University of Michigan 6/7/1999 to 8/13/1999  
Research assistant to find recently declassified documents at the National Archives and Department of Energy Archives for a collective political biography of the three American physicists who created the hydrogen and atomic bombs.

Jennifer Egloff	BA Candidate	State University of New York –Buffalo	6/1/1999 to 8/30/1999
	Working on the Explore the Universe Gallery, preparing labels and files for space artifacts.		
Talia Eisenklam	BA Candidate	American University	6/1/1999 to 8/6/1999
	Assistance with reconfiguration of intern database, some coordination of Family Night and Brown Bag Lunch events.		
Kathryn Ersoz	BA Candidate	University of Delaware	6/1/1999 to 8/6/1999
	Conservation of aeronautical materials.		
Victoria Keener	BA Candidate	Rice University	6/7/1999 to 8/13/1999
	Restoration of aft fuselage section of the <i>Enola Gay</i> B-52.		
Jeremy Linden	BA Candidate	Vassar College	6/1/1999 to 8/6/1999
	Working in the NASM Archival Division on the Rudy Arnold Photograph collection.		
Seema Patel	BA Candidate	Harvey Mudd College	6/21/1999 to 8/27/1999
	Working with The Museum System, a database.		
Andrea Pippins	BA Candidate	Temple University	6/7/1999 to 8/13/1999
	Working on graphic design techniques on a project in the How Things Fly Gallery.		
Brian Rice	BA Candidate	University of Virginia	7/28/1999 to 8/30/1999
	How Things Fly Resource Room Assistant.		
Jonathan Rigaud	BA Candidate	ESTACA	7/12/1999 to 8/30/1999
	Working in the How Things Fly Gallery.		
Laura Segall	BA Candidate	Rochester Institute of Technology	6/1/1999 to 8/30/1999
	Photography assistant.		
Maitreya Sims	BA	University of Florida	6/1/1999 to 8/6/1999
	Arranging lectures and seminars.		
Nataliya Tintcheva	BA Candidate	Washington University	6/1/1999 to 8/6/1999
	Graphic design and exhibition design projects.		
Miryam Bak	BA Candidate	University of London	6/21/1999 to 8/27/1999
	Assisting the Graphic Production specialists with silk screening needs pertaining to Hats and Kente exhibitions.		
Daniel Beeton	BA	University of Wisconsin –Madison	2/19/1999 to 5/7/1999
	To assist in cataloguing National Museum of African Art's Educational Teaching collection.		
Shannon Brackett	High School Degree Candidate	Anacostia Senior High School	7/12/1999 to 8/31/1999
Dominique DjeDje	BA Candidate	George Washington University	6/1/1999 to 8/13/1999
	Assisting with the catalogue entry of the postcard collection in the Archives into SIRIS.		

### *National Museum of African Art*

Julia Young Kim	BA Candidate	Johns Hopkins University	6/7/1999 to 8/13/1999
	Develop activities for children in conjunction with the exhibitions "Wrapped in Pride: Ghanaian Kente and African American Identity" and "Hats Off: A Salute to African Headwear."		
Melissa McKenzie	BA	University of Michigan	10/19/1998 to 12/23/1998
	To assist Veronika Jenke in various educational projects.		

Marion Norman	AA Candidate	Prince George's Community College	9/7/1999 to 11/12/1999	Studying African Art, its history and beauty and how it is exhibited. Interested in the background work that goes into the final exhibition.
Allison Wilson	BA	Brigham Young University	7/6/1999 to 8/13/1999	Assisting in the Registration Department with the remeasuring and recording of dimensions of collection objects in The Museum System (TMS), a collection management database.
Ann Becker	MA Candidate	George Washington University	9/10/1999 to 4/2/2000	Awarded Rachlin Stipend. Participated in National Museum of American Art advanced-level internship program—a yearlong overview of museum operations.

### *National Museum of American Art*

Peter Brownlee	PhD	George Washington University	9/10/1999 to 4/21/2000	Awarded Mandil Stipend. Participated in National Museum of American Art advanced-level internship program—a yearlong overview of museum operations.
Pamela Collins	BA Candidate	Salisbury State University	6/11/1999 to 8/6/1999	Assistance in implementation of new management software and other tasks in association with the Old Patent Office Building manager.
Jessica Crittenden	BA	Randolph-Macon Woman's College	6/11/1999 to 8/6/1999	General assistance on all levels of the registrar's office.
Madeline Fairbanks	MA Candidate	Minneapolis College of Art and Design	6/7/1999 to 8/13/1999	Researching American artist George Catlin, in particular, developing a timeline for his life, putting into context events of his time. This would be in conjunction with other current documentation and new media.
Catherine Foster	BA	Bryn Mawr College	9/10/1999 to 4/2/2000	Participated in National Museum of American Art advanced-level internship program—a yearlong overview of museum operations.
Amy Gotzler		American University	9/10/1999 to 4/21/2000	Participated in National Museum of American Art advanced-level internship program—a yearlong overview of museum operations.
Rachel Horoschak	BA Candidate	Alfred University	6/11/1999 to 8/6/1999	Assistance on several library collections, as well as preparation for library move in association with the Old Patent Office building renovation.
Lauren Hutchinson	BA Candidate	Duke University	6/11/1999 to 8/6/1999	Assistance with preparations for a traveling exhibition on American impressionism.
Kristen Kertsos			6/11/1999 to 8/6/1999	General assistance on all levels of the Registrar's Office.
Sara Levitt	BA Candidate	Brigham Young University	6/11/1999 to 8/6/1999	Assisting curators on Latino collections and nineteenth-century collections and other general functions of the curator's office.
Levia Lew	BA Candidate	Randolph-Macon Women's College	6/11/1999 to 8/6/1999	Assistance on exhibition "Glass, Glorious Glass," and preparations for exhibition of the permanent collection.

Carrie Ann Miller	BA Candidate Assistance in general functions of the Public Affairs office and organizing a database of information involving 60 traveling exhibitions.	Salisbury State University	6/11/1999 to 9/10/1999
Nathan Moon	BA Participated in National Museum of American Art advanced-level internship program—a yearlong overview of museum operations.	Brigham Young University	9/10/1999 to 4/21/2000
Maya Narkus-Kramer	BA Candidate Video production for traveling exhibition “Scenes of American Life,” as well as research, design, and production of a teachers’ study guide.	Maryland Institute –College of Art	6/11/1999 to 8/6/1999
Virginia Treanor	MA Participated in National Museum of American Art advanced-level internship program—a yearlong overview of museum operations.	American University	9/13/1999 to 4/12/2000
Mary Wang	BA Candidate Working on three traveling shows: “Scenes of American Life,” “Young America,” and “Lure of the West.” Tasks include research and assistance in writing the exhibition labels.	University of California –Berkeley	6/7/1999 to 8/13/1999

### *National Museum of American History*

Selma Amaral	AA Candidate Working in Program in African American Culture.	Montgomery College	1/25/1999 to 5/31/1999
Rebeca Ames	BA Candidate Research, organize, and compile database of the National Print Exhibitions—a sale of graphic arts at the Smithsonian from 1900–1970.	Smith College	9/7/1999 to 12/17/1999
Kelly Anderson	BA Candidate	University of California–Davis	6/25/1999 to 8/28/1999
Donnalyn Anthony	BA Candidate Researching the influences of African Americans on print and broadcasting media.	South Carolina State University	6/21/1999 to 8/13/1999
Emily Appel	High School Degree Candidate Rehouse and organize record sheets of collection fabric and samples of ribbon; research; database entry; assist with quilt collections.	Madeira School	9/22/1999 to 6/30/2000
Kara Artz	BA Candidate Working with the Education Department on the “Our Story” Program, planning and researching for the program, as well as working with public relations.	College of William and Mary	5/25/1999 to 8/6/1999
Humaira Ashraf	High School Degree Candidate Assistant in radio and television editing.	Paint Branch High School	7/13/1999 to 8/15/1999
Jordan Austin	BA Candidate Inventory, research.	Salisbury State University	6/10/1999 to 8/10/1999
Alexis Azar	BA Assisting in researching and implementing Bicycle Awareness Month for the month of May 2000 under National Museum of American History’s Lemelson Center.	Colby College	9/13/1999 to 6/1/2000
Angela Baccala	MA Candidate To “shadow” an Archives Center staff member; listening to reference requests, learning to answer routine questions, learning reference tools, and attending staff meetings.	University of Maryland –College Park	1/13/1999 to 5/14/1999



LaShonda Barnett	PhD Candidate	College of William and Mary	6/1/1999 to 8/1/1999	African American History Project; indexing "From Field to Factory" exhibition.
Patrick Berry	BA Candidate	George Washington University	9/7/1999 to 12/31/1999	Rehousing sports and entertainment collections.
Sara Bishop	BA Candidate	Hope College	3/15/1999 to 4/23/1999	Planning and implementing an Intern Seminar on a museum topic for other interns, and updating office publications dealing with the structure of the museum in order to obtain the final goal of gaining a better understanding of the internship office and museum structure.
Karen Bleier	BA Candidate	Brandeis University	1/25/1999 to 4/22/1999	Researching donors (corporate, individual), creating database contracts, attending meetings, researching other institutions on their development process and donor cultivations.
Leigh Bond	BA Candidate	Washington College	6/7/1999 to 8/20/1999	Background research on inventors and products in exercise machine history 1831-1950. Gathering data on biographies of inventors of these machines and the circumstances of their use in health clubs and gymnasiums.
Kristin Bonette	High School Degree Candidate	Landmark Career Academy	4/28/1999 to 5/27/1999	Helping with a variety of office tasks including phone, database, mailings and visitors.
Lauren Borchard	MA Candidate	George Washington University	1/11/1999 to 5/31/1999	Working on Rock 'n Soul, an exhibition scheduled to open in Memphis in 2000. Includes fact checking, quote finding, and working on any other exhibition-readying tasks as assigned.
Brigham Bowen	BA Candidate	Brigham Young University	5/4/1999 to 6/18/1999	Research project on the works of twentieth-century photographer Wallace Nutting.
Alexis Bowens	BA Candidate	Howard University	6/8/1999 to 8/9/1999	Intern will work with Niani Kilkenny and Luvenia George to research the roles of African American women in jazz and Office of Sponsored Project's music. Will also assist in logging materials in the archives of the Program in African American Culture.
Audrey Bower	BA Candidate	Harvard University	3/1/1999 to 5/31/1999	Working on the periodical archives, updating and preserving them.
Timothy Brixius	BA Candidate	Franklin and Marshall College	7/13/1999 to 8/13/1999	Redesign for the National Museum of American History's Office of Internships and Fellowships Web page.
Shelley Brooks	BA Candidate	University of Richmond	5/13/1999 to 7/31/1999	Plan and develop lectures, brown-bag lunches, and trips for summer internship program, coordinate orientation for summer interns, develop intern directory and mailings, and other projects as they develop.
Alexander Chan	BA Candidate	University of California-Davis	6/24/1999 to 8/27/1999	Historical research for doctoral fellow.
Zachary Changuris	BA Candidate	Shepherd College	6/1/1999 to 8/4/1999	Graphic design project: sign system for buildings, and exhibit design for American Legacies project.
Liana Chua	BA Candidate	Trinity College, Oxford University	7/6/1999 to 9/17/1999	Research and assistance in various exhibitions by the Department of Cultural History ("Piano 300," "Flat-Top Guitar"), and the setting up of new public programs office.

Melanie Clarke	BA Candidate Designing Web pages for the Archives Center Web site.	American University	2/16/1999 to 5/31/1999
Maria Rose Colacurcio	BA Assisting Luvenia George and Alonzo Smith on Duke Ellington Youth Festival research and other research projects.	Whitworth College	1/5/1999 to 3/1/1999
Jerry Colley	BA Sports and Leisure—U.S. Olympic exhibit, rehousing items from other exhibits, catalog items into computer.	Wake Forest University	5/24/1999 to 7/16/1999
M. Soledad Correa	Gain experience in the general work of a paper conservation lab.		1/11/1999 to 5/7/1999
Christina Cotter	BA Candidate Design project manager of "The Battle of Baltimore," a Hands-On-History room activity.	University of Colorado—Boulder	6/7/1999 to 8/6/1999
Leo Crane	BA Helping with current projects in Public Affairs.	Oxford University	7/6/1999 to 11/5/1999
Viviana Cristian	PhD Candidate Working with Dr. Ahlborn on a project involving religious objects located in the gift shop of the Basilica shrine dealing with Asian Indians.	Catholic University of America	5/28/1999 to 8/30/1999
Carrie A. Croucher	BA Candidate To study indigenous visual and textual productions of Hawaiian artifacts, and assisting with primary research and examining and writing up reports on materials.	College of the Holy Cross	1/20/1999 to 4/23/1999
Helen Daniels	BA Candidate Design Intern for Innovative Lives Project/Exhibit for Lemelson Center.	California Lutheran University	9/13/1999 to 12/1/1999
Erika Davis	BA Candidate Conduct research on African American expatriates in Europe, to be used in planning a future public program.	Xavier University	6/7/1999 to 8/13/1999
Elizabeth Davison	BA Candidate To get a general overview of the National Museum of American History from the administration to the archives. This internship is to serve as an introduction to the field of museum studies.	University of Virginia	3/15/1999 to 3/19/1999
Patrece Dean	MA Candidate	Howard University	10/1/1998 to 5/9/1999
Preston Denson	BA Candidate Developing educational programs with the Program for African American Culture.	Howard University	6/3/1999 to 9/13/1999
Anthony Dimos	BA Candidate Write about and research the life of Charles Dhalgreen.	University of Chicago	6/21/1999 to 8/27/1999
Christopher DiTomo	BA Researching Black history and culture exhibits at the Smithsonian circa 1930–1996, especially Herbert Ward African Collection, updated material in current African Voices Project, National Museum of History and Technology exhibits 1969–76, specific exhibits at Anacostia Museum 1969–79 and their representation in press.	University of Illinois —Urbana-Champaign	7/1/1999 to 8/31/1999
Cybele Dreskin	BA Collections management assistant. Working with collection cataloguing information, entering data, assisting staff in research, creating object lists. Assisting with cataloguing and research on the Muybridge Collection for upcoming exhibition.	Washington University	2/2/1999 to 5/31/1999

Kristina DuRocher	BA Candidate	Michigan State University	5/9/1999 to 6/30/1999
Involved with the Rock 'n' Soul exhibition and will work with Pete Daniel on other projects. Attend Rock 'n' Soul meetings, do research at the Library of Congress and National Archives and keep up project files.			
Elizabeth Eckstein	BA Candidate	University of Virginia	6/28/1999 to 8/6/1999
Christopher Eichler	BA Candidate	Tufts University	6/7/1999 to 8/10/1999
Working with exhibit space design, surveying visitors.			
Erin Eisenbarth	BA Candidate	University of Texas–Austin	6/7/1999 to 7/2/1999
Historical research into the backgrounds of the original owners of outfits in the costume collection, 1910–1918.			
Thomas Eisinger	MA Candidate	University of Maryland –College Park	1/20/1999 to 8/13/1999
Processing the Bickel papers. Bickel was one of the more prolific inventors of the twentieth century.			
Jennifer Feldman	BA Candidate	American University	1/22/1999 to 4/22/1999
Restoration of H and H Automat. Repair of marble, including cleaning and polishing.			
Rebecca Fifield	MA Candidate	George Washington University	1/19/1999 to 4/30/1999
Research and document selected 1830s women's costumes in the National Museum of American History collection.			
Michelle Flatman	BA Candidate	University of California–Davis	6/24/1999 to 8/31/1999
Helping with exhibition on History of Medical Sciences and helping with editing a book on history of prosthetics.			
Tuliza Fleming	Research Assistant to the Archives of American History.		7/6/1999 to 12/31/1999
Andrew Foltz	BA Candidate	Warner Pacific College	9/27/1999 to 12/15/1999
Conducting primary research for a book on the Washington Monument.			
Amy Gallagher	BA	Louisiana State University	2/2/1999 to 7/31/1999
Identification and analysis of coverlets. Additional cataloguing projects.			
John Gibson	PhD Candidate	Wake Forest University –School of Medicine	5/24/1999 to 7/30/1999
Working on “West Point” and “Westward Expansion.”			
Desiree Girelle	BA Candidate	George Mason University	1/13/1999 to 1/31/2000
Digital imaging lab; scan archive photos into computer and help coordinate future intern procedure to convert photos to digital.			
Scott Gotschall	BA Candidate	Indiana University	6/14/1999 to 8/30/1999
File and organize musical scores and parts, then review specific musical selections and make specified edits of performance pieces.			
Anja Grater	BA	University of Stuttgart	8/2/1999 to 9/30/1999
Translation of German on artifacts.			
Andrew Hall	BA Candidate	University of Virginia	6/17/1999 to 8/30/1999
Jeannie Han	High School Degree Candidate	Barrie School	1/20/1999 to 3/10/1999
Go all over the museum in search of old people. It has to do with the UN project of old persons.			

Kimberly Hase	MA Candidate Assist with the Star-Spangled Banner	State University of New York–Brockport Web site development.	7/1/1999 to 8/27/1999
Sarah Haviland	BA Candidate Member of “Rock ‘n’ Soul” exhibition. Research at Library of Congress and National Archives. Attend meetings and keep up files on the project and other projects with Pete Daniel involving research and collections.	Michigan State University	5/10/1999 to 6/30/1999
Janet Haws	BA Candidate Working with “Battle of the Bands” archival materials.	College of William and Mary	6/21/1999 to 8/12/1999
Amy Henderson	PhD Candidate To develop a bibliography of journals, published letters, and novels from 1775–1825. to identify passages that refer to appearance, fashion, clothing, textiles, and household activities related to the same, and passages that reveal attitudes about gender conditions. This will provide background for research on the Copp collection.	University of Delaware	6/8/1999 to 8/6/1999
Candace Hewitt	BA Candidate African American Communities project focus on Black military history and African American culture in the 1930s and 1940s (specifically Catherine Dunham’s works and WPA theater.	Smith College	9/7/1999 to 12/17/1999
Lorel Hiramoto	BA Candidate Doing research for “Ethnic Imagery in American Advertising.”	Smith College	9/7/1999 to 12/17/1999
Helen Hookway	BA Research, stock car exhibition, “Rock ‘n’ Soul” exhibition.	University of York	7/30/1999 to 10/10/1999
Julie Hoskin	BA Ethnic Imagery Project.	Appalachian State University	4/20/1999 to 7/16/1999
Melodee Hotai	BA Star-Spangled Banner Project. Work with senior educator and research, create and develop a distance learning program for middle school students about the Star-Spangled Banner.	University of California –Los Angeles	9/14/1999 to 12/8/1999
Amy Howton	MA Candidate Researching the role that quilts—made by slave women—played in the Underground Railroad as a form of resistance. I plan on coordinating this project later on with the upcoming Underground Railroad celebration in Cincinnati, Ohio. I will also be designing the program for the Martin Luther King celebration in January 2000.	University of Cincinnati	6/21/1999 to 7/30/1999
Annette Isgitt	BA Candidate Research on beginnings of Buffalo soldiers and current life of surviving members.	State University Natchitoches	8/30/1999 to 11/30/1999
Jeffrey Jensen	BA Candidate Working in the Armed Forces Collection, studying how people remember and commemorate war.	University of Arizona	5/25/1999 to 8/8/1999
Kimberly Kahne	Popular music from the 1930s to the 1970s.	Smith College	9/7/1999 to 12/17/1999
Chad Kannady	BA Candidate Intern will inventory the firearms and edged weapons, rehouse the pistol collection, and assist with research and other curatorial duties.	Wichita State University	1/19/1999 to 5/1/1999
Suzanne Karr	BA Candidate Assisting with a pressed glass catalog via search for relevant photographs as comparisons, assisting with data entry and file update, and assisting as recorder, with the Ceramics Hall take-down.	Brown University	6/7/1999 to 7/30/1999

Laurie Kelleher	BA Candidate Working with Dr. Ahlborne to prepare religious medals for cataloging and display.	College of the Holy Cross	9/20/1999 to 11/30/1999
Laura Keller	BA Enrichment program. Assist in Intern and Fellowship Office.	University of Maryland –Baltimore County	9/7/1999 to 12/31/1999
Soo-Yeun Kim	BA Candidate “Showtime” project; exhibiting posters and photographs related to American entertainment over the past hundred years (including circus, event, games, shows, etc.).	American University	6/9/1999 to 8/6/1999
Amber King	BA Working on Star-Spangled Banner Project, helping Marilyn with her dissertation, developing skills in museum work.	Carnegie Mellon University	6/8/1999 to 12/31/1999
Sarah Klein	PhD Candidate Library of Congress research and other research tasks related to Sarah Johnson’s scholarship.	University of Maryland –College Park	4/3/1999 to 8/31/1999
Kathleen Knowles	BA Candidate Assist senior exhibition designer with new installation of “On Time” exhibition. Refinement of architectural drawings, verification of layout, supplies/materials ordered, review bids, and any other duties required.	Corcoran College of Art and Design	7/6/1999 to 9/15/1999
Swantje Lahm	MA Candidate Go through collections of advertising history and look for ethnic imagery.	Johns Hopkins University	6/2/1999 to 7/31/1999
Jennifer Lamping	BA Candidate Orientation leader, as well as possibly aiding Steven Fisher in Design and Planning once a week.	University of Michigan –Ann Arbor	6/1/1999 to 8/13/1999
Tippitt Lancaster	BA “Piano 300” exhibition: work with project manager, curator, and project director.	University of California –Riverside	3/3/1999 to 3/3/2000
Trisha Laski	MA Candidate Work on finding aid/database for objects in Women’s History Collection, work with the Women’s History Document Collection (including organizing documents) and general assistance with collections management activities in Political History Collection.	University of Maryland –College Park	9/20/1999 to 12/13/1999
Sonya Lawyer	AA Candidate Responsible for a variety of traditional and photographic formats in digital and electronic photographic media. Working with primary photographs on projects dealing in copy and illustration.	Montgomery College	9/20/1999 to 12/15/1999
Joan Layne	MA Candidate Research on a book about the first monument to a president.	University of South Alabama	2/1/1999 to 5/31/1999
Shin-Fen Lee	MA Candidate Exhibition design project, to learn how to conduct exhibit designs.	New School University –Parsons School of Design	2/3/1999 to 5/14/1999
Stacy Levine	BA Candidate Helping coordinate Latino programs ( <i>Encuentos</i> ) at National Museum of American History.	George Washington University	6/17/1999 to 12/31/1999
Suzanne Lewis	BA Collections Management; cataloging, arranging photographic files, research in documentary collections.	University of Cape Town	4/5/1999 to 8/31/2000

- Abena Lewis BA Candidate Howard University 6/7/1999 to 8/30/1999  
Assisting with research for the gallery talk in the museum's "Looking American" series. I will look into the costume collection using the collection's catalog card, build a resource for the project using the collection's library and the SI library, and interpret the designer's vision, technique, design, and structure for the October lecture.
- Thea Agape Lim BA Candidate McGill University 6/7/1999 to 8/13/1999  
Working directly with artifacts, specifically with a section of the artificial hearts. It is hoped the intern will glean information related to their production and to set these artifacts into the overall historical context of the artificial heart program. Expected products include a timeline of the artificial heart program at the University of Utah and historical descriptions for the museum's electronic base.
- Barbara Luthi MA Candidate University of Basel, Switzerland 2/8/1999 to 4/2/1999  
Research at archives in the metropolitan area. Aid in tasks as necessary for manuscript completion. Wider understanding of the function of the National Museum of American History.
- Rebecca Lynch BA Candidate Boston University 1/25/1999 to 4/22/1999  
I will be working with Mr. Daniel on his upcoming publication, as well as assisting the team working on the "Rock 'n' Soul" exhibition.
- Hilary Lynch BA Candidate Pepperdine University 5/3/1999 to 7/7/1999  
Public Affairs assistant: duties include media lists, releases, and responding to press and media inquiries.
- Jeffrey Lynch BA Candidate Wentworth Institute of Technology 2/1/1999 to 5/3/1999  
To design the welcome center at the National Museum of American History and work with Tom Kinnard. Models, sketches, and other office work will be the main job for the position.
- Lenka Makalova AA Candidate Montgomery College 2/2/1999 to 7/31/1999  
I will sort coins and paper money and place them in the appropriate categories. Also, computer input will be another project I will be working on.
- Melanie Martens MA Candidate University of Toronto 6/1/1999 to 8/30/1999  
Demonstrations of nineteenth-century technology and research on the same to expand demos such that they include information on the participation of women in early printing.
- Sara Martin BA University of California -Santa Barbara 3/1/1999 to 8/31/1999  
General and specific research for the "America on the Move" exhibition project, as well as research assistance with the writing of *Lies Across the Landscape: What Our History Markers, Memorials, and Museums Got Wrong*.
- Kathleen Mayko BA Smith College 9/7/1999 to 12/17/1999  
Research on photographs of prominent twentieth-century women.
- Kimberly McCray BA Candidate Saint Michael's College 5/25/1999 to 8/6/1999  
Working with the "Our Story" Program to help develop a Web site, doing research, and other duties associated with layout for program materials. "Our Story" is a monthly series of programs designed to bring history to life through museum objects and children's literature.
- Emily McDonough BA University of Florida 5/24/1999 to 8/15/1999  
Evaluation of and research for a new activity for the museum's Web site, as well as research and visitor testing of a new hands-on activity on the Battle of Baltimore
- Meg McGinn BA Candidate Skidmore College 6/14/1999 to 8/7/1999  
Assist in research for the upcoming exhibition "Leaps and No Bounds."

Devon McPhee	BA Create 1999 "Smithsonian Internship Opportunities" book for the museum of American History	University of Michigan	6/1/1999 to 7/31/1999
David Mish	BA Candidate Research for and design of Web page for National Museum of American History.	Yale University	6/2/1999 to 8/13/1999
Laura Munro	BA Candidate Malloy Labor Collection, general collections management assistance, cataloguing and rehousing, sorting documents collection.	Pennsylvania State University	5/24/1999 to 7/30/1999
Frank Murphy	BA Working on the Office of Information Technology's Web page, utilizing the Technology Archives for research.	Bloomsburg University	1/19/1999 to 5/1/1999
Jason Myers	BA Candidate Exploring the themes, values, ideas that have become a part of the African American (and American) world view that has its basis in African folkloric traditions.	Portland State University	3/29/1999 to 6/6/1999
Viet Nguyen	BA Candidate The Legacy of Jim Henson in twentieth-century pop culture.	Duke University	6/7/1999 to 8/30/1999
Midori Okazaki	MA Candidate Assist in implementation of National Museum of American History Electronic records project and maintenance of on-line collection finding aids. Will also process additions to Kliman Jazz photo collection.	Western Washington University	4/5/1999 to 6/1/1999
Jennifer O'Keefe	BA Candidate Researching the image of women in nineteenth- and twentieth-century military.	University of Delaware	6/7/1999 to 8/27/1999
Charity Oliver	BA Candidate Working with sports equipment, baseball cards, Stall and Dean collection.	University of Maryland -College Park	5/24/1999 to 7/14/1999
Kristen Ostheimer	MA Nobel exhibition: script development and research on audiovisual materials to be used in the exhibition.	Northeastern University	9/13/1999 to 12/14/1999
Leigh O'Sullivan	Research on Women's Dress Collection from 1840-1860.	Smith College	9/7/1999 to 12/7/1999
Priya Patel	BA Candidate Researching lecture discussions stemming from the life and work of W.E.B. DuBois.	Claremont McKenna College	6/2/1999 to 7/31/1999
Shanon Peterson	BA National benchmarking studies, strategic planning and audience plan studies, and other projects in the planning office and other offices.	Texas A&M University	6/1/1999 to 8/6/1999
Kyle Plummer	BA Candidate Help design and work with Tom Kennard designing the welcome center; making models, sketches, and office work. Also, work with other designers in the design offices to assist in smaller projects.	Wentworth Institute of Technology	2/1/1999 to 5/5/1999
Michelle Pollak	BA Candidate Public Relations intern.	American University	5/24/1999 to 8/11/1999
Lee Puterbaugh	BA Candidate Assistance with creation of Digital Imaging Lab.	Western Maryland College	5/4/1999 to 6/15/1999

Fiorella Remus	BA Candidate Classification and description of photographic collections.	Universidad Nacional Autonomo de Mexico	6/15/1999 to 8/15/1999
Ted Ririe	BA Candidate Research project on the development of electrophoresis equipment.	Brigham Young University	5/4/1999 to 8/12/1999
Laura Robbins	BA Candidate Doing research on Mexicans and Mexican-Americans and how American culture treated them between 1880-1910.	University of Pennsylvania	6/17/1999 to 8/7/1999
Averi Roberts	MA Candidate Contributing to "Our Story," children's literature program. Coordinating and organizing March 20 "Our Story" program.	George Washington University	1/11/1999 to 4/8/1999
Todd Robinson	MA Candidate Background research on inventors and products in exercise machine history. Research data on the biographies of inventors, as well as on the circumstances of their use in health clubs and gymnasiums.	University of Massachusetts	6/7/1999 to 8/13/1999
Kara Ryan	BA Candidate Wide range of curatorial experience.	James Madison University	6/1/1999 to 8/12/1999
Alexis Saarela	BA Candidate Ethnic Imagery in the Landscape of Commerce: research in Archives and advertising collection for this project.	Smith College	9/7/1999 to 12/17/1999
Florencia Sader	Assist in the implementation and production of "ENCUENTROS! Latin America at the Smithsonian," a series of free public programs.		10/1/1998 to 12/5/1998
Mia Schafer	Assistant to the senior exhibit designer.		6/29/1999 to 8/31/1999
Elizabeth Schmidt	BA Candidate "Piano 300" is a multifaceted, pan-Institutional project celebrating the 300th anniversary of the invention of the piano.	Wellesley College	5/24/1999 to 7/10/1999
Julie Schumaker	PhD Candidate Collections management for Domestic Life Collection—accessioning, cataloging, numbering, and housing projects. Historic research and interpretation of objects, pictures, and narrative to assist in the development of outreach products, such as a brochure, an exhibition, a public program, and a publication. Exhibition development and maintenance of "After the Revolution" and "Ipswich House."	George Washington University	6/14/1999 to 9/17/1999
John J. Sertich, Jr.	MA Candidate Assisting on project management for Americanos exhibit; research for catalogue for collegiate legacy; data entry for African American Index.	University of Maryland —College Park	1/19/1999 to 5/24/1999
Patrick Shea			10/5/1998 to 9/30/1999
Rosalind Shipley	BA Candidate Assisting with collections research, organization, rehousing, and cataloging of photographs in the History of Technology Department.	Maryland Institute —College of Art	1/27/1999 to 5/15/1999
Rebecca Short	BA Candidate Analysis of letters, correspondence, journals, and official and personal records of Buffalo Soldiers, Native Americans, and Euro-Americans to understand their perceptions of one another.	University of Maryland —College Park	9/2/1999 to 11/30/1999



Chad Shuskey	BA Candidate	Hiram College	5/17/1999 to 8/14/1999
	Helping Peggy Kidwell write a paper on the impact of early calculators. Filing and helping put together showcase for 2000 Olympics with Jane Rogers.		
Emily Sloat Shaw	BA	Amherst College	9/15/1999 to 12/31/1999
	Working with Howard Bass and Sue Walker in the Public Programs Office. I will assist with the Cherokee Program, "Piano 300," and "American Slavery in History and Memory." As an intern, I will attend meetings and perform research for programming.		
David Smolen	MA Candidate	University of Maryland -College Park	1/13/1999 to 5/31/1999
	Arrange and describe the Kushi macrobiotics collection and then enter this collection into the SIRIS database.		
Emily Spates	BA Candidate	University of California-Davis	9/14/1999 to 12/3/1999
	Assist with "Our Story" Program in planning and organizing Event Days; maintain "Our Story" hotline; research "Our Story" Program for winter.		
Julie Statz			10/13/1998 to 12/31/1998
	Rehousing, arrangement, and description of new archival collections. Among other rehousing projects, preserving a scrapbook documenting Maidenform's Los Angeles office from the 1950s.		
Katarina Steinijs	BA Candidate	Frankfurt University	6/1/1999 to 7/12/1999
Matthew Stephenson		Oxford University	3/1/1999 to 6/1/1999
	Assist in primary source research of governmental documents, print media, publicity ephemera, and motion pictures for project titled "Hollywood's Good Neighbor Policy and U.S.-Latin American Relations, 1938-1947." Research at the Smithsonian, Library of Congress, and National Archives.		
Caeli Thibeault	High School Degree Candidate	Carbondale Community High School	3/15/1999 to 3/19/1999
Jose Torres	MA Candidate	University of Texas-San Antonio	6/1/1999 to 7/26/1999
	Museum Intern Partnership Program participant.		
Melissa Upton	BA Candidate	Wheaton College	1/4/1999 to 1/29/1999
	Assisting Mr. Rand with a publication on the statue of George Washington by Horatio Greenough.		
Jaime Vazquez	BA Candidate	University of Michigan	5/24/1999 to 8/14/1999
	Assisting the "SWAT team" on the "Rock 'n' Soul" exhibition.		
Emilie Volkert	BA Candidate	Ohio University	6/17/1999 to 8/30/1999
Elaine Wang	BA Candidate	Tufts University	7/1/1999 to 8/13/1999
	Assistant to the Intern Coordinator, helping to orient new interns and fellows, organize brown-bag lunches, and other events.		
Amy Kate Watia	MA Candidate	University of Michigan	6/7/1999 to 8/13/1999
	A major archival processing project involving the preparation of collections for research and the dissemination of collections information through print and electronic media.		
Carrie Watts	BA		1/25/1999 to 5/15/1999
	To gain a general understanding of the responsibilities of a costume curator by assisting with the office move, preparing files for Smithsonian Archives, assembling materials for a "Looking American" presentation, and refinement of twentieth-century designer files.		
Laura Weber	BA Candidate	Columbia University	6/1/1999 to 7/30/1999
	Research intern.		

Douglas Weiss	BA Candidate Research project on genetic treatment	Carleton College	6/14/1999 to 8/7/1999
Noah Buck Wester	BA Web site work.	University of Maryland –College Park	5/4/1999 to 6/1/1999
Antonio Williams	BA Candidate Research assistant helping organize papers of Dorothy Hyatt.	Macalester College	6/7/1999 to 7/31/1999
Christine Winkler	BA Candidate Database research on the Trade Catalogue History of the American sewing machine.	Giessen University	7/19/1999 to 8/13/1999
Sarah Wintle	BA Candidate Constructing a finding guide to a portion of the Reform Movements Collections in the division of Social History.	Smith College	9/7/1999 to 12/17/1999
Catherine Wolfe	BA Candidate "Paint by Number" Exhibition.	University of California–Davis	9/14/1999 to 12/3/1999
Leah Woodward	BA Candidate Aide to Mrs. Green in the coordination and production process of Holiday Celebration, sponsored by the National Museum of American History in December 1999.	Florida A&M University	6/15/1999 to 7/29/1999
Katherine Worboys	BA Candidate Assist in primary source research of governmental documents, print media, and motion pictures for project titled "Hollywood's Good Neighbor Policy and U.S.-Latin American Relations, 1938–1947."	Duke University	5/27/1999 to 8/30/1999

### *National Museum of Natural History*

Catherine Adams	BA Candidate Research on photographs of North American Indians.	George Washington University	6/1/1999 to 12/31/1999
Ana Agreda	BA Project will examine microscopic feather structures of two species of birds (anatini vs. aythyni) in the Anatidae family. The purpose of this examination is to compare the feather structures in diving and non-diving ducks in order to provide information relating to the functionality of these structures.	Catholic University in Quito	5/31/1999 to 8/8/1999
Beatrix Arendt	BA Working on a project at the National Museum of Natural History.	Emory University	9/15/1999 to 12/31/1999
Hamilton Beltran	MA Floristic studies at the Lower Urubamba, Cusco, Peru.		6/15/1999 to 6/29/1999
Alexander Benitez	PhD Candidate	University of Texas–Austin	1/19/1999 to 5/4/1999
David Bennett	MA Candidate Participation in geographic information systems and computer mapping projects for the scientific staff at National Museum of Natural History.	Clark University	6/2/1999 to 8/15/1999
Erin Bishop	BA Candidate Systematic investigation of Pleuronectiformes (flat fish).	Coastal Carolina University	5/17/1999 to 8/15/1999
Sydella Blatch	BA Candidate A biodiversity study on Costa Rican flower flies (Diptera syrphidae) that describes and analyzes these flies and leads to both a traditional scientific paper as well as a Web publication.	University of Maryland –College Park	5/29/1999 to 8/8/1999

Rebecca Blom	BA		10/23/1998 to 5/31/1999	Illustration research of photographs for the Handbook project on the Southeast volume; also, research on photographers and historical data relating to North American Indian photographs.
Robin Brown	BA Candidate	University of Florida	5/17/1999 to 8/13/1999	Cataloging the 1978 film project "Film Studies of Traditional Tibetan Life and Culture: Ladakh, India, 1978."
Krista Cadavero	BA Candidate	Columbia Union College	9/15/1999 to 8/31/2000	Stable isotopic analysis of plankton foraminifera species in the mid-Cretaceous examining the oceanic anoxic event at the Cenomanian boundary.
Nicole Campos	BA Candidate	California State University –Sacramento	5/29/1999 to 8/8/1999	Using published field reports and copies of Georgia state field records, the researcher will develop a set of material criteria that can be used to effectively separate utilitarian from funerary objects at Etowah, based on items of known provenience.
Laura E. Cannon	High School Degree Candidate	Barrie School	1/6/1999 to 3/3/1999	Assisting with various curatorial duties to include data basing the Noctuidae collection, transferring specimens to soft-bottomed unit trays, organizing genitalia slide collection, and organization and curation of collections.
Sulema Castro	BA Candidate	University of Texas –Brownsville	5/29/1999 to 8/8/1999	Morphological investigation on Bermuda Killifish populations.
Min-Yuen Cynthia Cheung	BA Candidate	University of Oklahoma	5/29/1999 to 8/8/1999	An investigation of the relationships of <i>Brittanichthys</i> , a characiform fish from South America.
Natasha Cobb	BA Candidate	College of Charleston	1/4/1999 to 1/18/1999	
Andrea Coleman	BA Candidate	New Mexico State University	1/4/1999 to 1/18/1999	Studying Pacific Ocean Coral Reef sea cucumbers.
Sarah Corbett	BA Candidate	Valdosta State University	5/29/1999 to 8/8/1999	Examining the anatomy of the genus <i>Commelina</i> and comparing with leaf anatomy of the genus in order to determine taxonomic use of these structures.
Nieves Ehrenberg Coll	High School Degree Candidate	Barrie School	1/6/1999 to 3/3/1999	Assisting with various curatorial duties to include data basing the Noctuidae collection, transferring specimens to soft-bottomed unit trays, organizing genitalia slide collection, and organization and curation of collections.
Kristi Fortschneider	BA Candidate	Beloit College	1/28/1999 to 5/7/1999	Clerical work, liaison between press and scientists, help make "media report," direct film crews.
Laura Fry	BA Candidate	Rhode Island School of Design	6/28/1999 to 8/31/1999	Intern will 1) ink illustrations of Burgess Shale animals for possible use in Smithsonian exhibition "The Burgess Shale: Evolution's Big Bang," 2) rehouse nineteenth-century illustrations of dinosaurs, and 3) prepare children's drawing of triceratops for exhibit.
Nick Garland	BA Candidate	University of Kentucky	5/29/1999 to 8/8/1999	A qualitative and quantitative analysis of plant-insect associations on a Lower Permian redbed flora from north-central Texas.
Aspen Garry	BA Candidate	University of Arizona	5/29/1999 to 8/8/1999	Investigation of deep southern ocean photographs to determine fish microhabitats.

LeeAnn Gennett	BA Research on George Catlin's paintings.	William Paterson University	6/7/1999 to 8/13/1999
Beau Goldstein	MA Candidate Explorations in forensic anthropology.	Arizona State University	1/19/1999 to 3/26/1999
Crystal Gonzales	BA Candidate	University of New Mexico	1/3/1999 to 1/18/1999
Erin Graves	BA Activity-based learning. Developing experiential opportunities for families with children ages 7–11 in the permanent exhibits halls of the National Museum of Natural History and in the museum's Discovery Room.	Wake Forest University	7/1/1999 to 9/1/1999
Eleanor Grimm	High School Degree Candidate Production of chronology of approximately 10,000 ethnographic/travel slides by Charles Webb, and reorganization of collection based on findings.	George Mason High School	6/22/1999 to 9/4/1999
Becki Grove	MA Candidate Analysis of dental pathology in a sample of prehistoric Sudanese skeletal remains from the necropolis of Geili.	George Washington University	6/14/1999 to 8/20/1999
Samuel Hall	BA GIS intern; assisting on projects involving geographic information systems including digitizing, database entry, editing, and visualization.		10/26/1998 to 3/31/1999
Jessica Hansbrough	BA Candidate Updating and computerizing descriptions of several thousand images of Eastern N. American Indians predating 1860.	University of Chicago	6/21/1999 to 8/27/1999
Patricia Harlfinger	BA Candidate Daily care and maintenance of arthropod exhibits. Working with the public through presentations and handling of live insects.	University of Vienna	7/25/1999 to 9/15/1999
Noel Heim	BA Candidate Developing a test for identifying plants from single or partial leaf specimens. This test will allow paleobotanists to determine how accurate their plant (fossil and living) identification skills are.	University of Chicago	6/14/1999 to 8/30/1999
Taneika Hughes	BA Candidate Exploration and documentation of the selection process believed to determine the reasoning behind inconsistent removal of remains from a former burial yard in St. Johnsbury, Vermont. Perhaps the presence of pathologies, a fear of the deaths, supernatural beliefs, and associated customs—maybe even witchcraft.	Howard University	4/5/1999 to 12/31/1999
Javier Icochea	Revision of amphibians and reptiles from Urubamba Lower River, Cusco, Peru.		7/12/1999 to 7/27/1999
Erin Jandebeur	BA media events and press releases, specifically working on the Viking exhibition opening April 2000.	San Diego State University	8/9/1999 to 5/31/2000
Anne Jefferson	BA Candidate The project will be sedimentological and morphological analyses of the Holocene Rio Grande Delta, in Texas and Mexico. The focus will be on fluvial channel meandering and distinguishing Holocene from Pleistocene deposits.	Johns Hopkins University	5/29/1999 to 8/8/1999
Melissa Jensen	BA Candidate Species turnover in the Oecophorid moths of Plumbers Island, in association with vegetational succession.	Cornell University	5/29/1999 to 8/8/1999

Kristen Johnson	BA Candidate	Washington University	5/17/1999 to 7/30/1999
	Work on the preparation of mammal specimens for installation into the collection including necropsy, and skeletal cleaning.		
Meredith Kilduff	BA		1/18/1999 to 7/5/1999
	Working on research for the <i>Handbook of North American Indians</i> project.		
Christopher Knouss	MA Candidate	University of Maryland –College Park	2/13/1999 to 8/13/1999
	Working with Geographic Information Systems projects, including spatial digital database entry and editing.		
A. Carolina Laughlin	BA Candidate	University of Texas –Brownsville	5/29/1999 to 8/6/1999
	The genus <i>Bulia</i> consists of four species, two of which are not separable by non-genital characters. By dissection, the distribution and phylogenetic relationship will be determined.		
Yi-Jung Lin	MA Candidate	University of Colorado–Boulder	6/1/1999 to 6/25/1999
	Curate the mollusk collection into metal drawers and label the cases and drawers; catalog pertinent portion of the secondary type collection; help to move the mollusk collection.		
Christina Lopano	BA Candidate	Virginia Polytechnic Institute and State University	5/29/1999 to 8/8/1999
	Determining the crystallization history of the Moorefield Pegmatite, Amelia, Virginia.		
Janell MacDonald	BA Candidate	Salish-Kootenai College	1/4/1999 to 1/18/1999
Sabina Aguilera Madrigal	BA Candidate	Escuela Nacional de Antropología E Historia	5/24/1999 to 11/30/1999
	Elaboration of a Web page related to textiles from southwest United States and northern Mexico.		
Svetlana Maslakova	MA Candidate	Moscow State University	1/25/1999 to 9/1/1999
	Preliminary cladistic analysis of pelagic Nemertean (Hoploneurini nemertini), an enigmatic group of marine worms.		
Brenda McLain	Documentary photography of exhibits in the Natural History Museum. Studio photography of exhibits to document ongoing curatorial research projects. Field research documentation photography for potential use in National Museum of Natural History publications.		1/22/1999 to 12/31/1999
Meredith A. Mennitt	High School Degree Candidate	Barrie School	1/6/1999 to 3/3/1999
	Assisting with various curatorial duties to include databasing the Noctuidae collection, transferring specimens to soft-bottomed unit trays, organizing genitalia slide collection, and organization and curation of collections.		
Denise Mix	MA Candidate	George Washington University	5/17/1999 to 8/13/1999
	To prepare a disaster preparedness manual for the Collections Management office of the Paleobiology Department and to learn basic functions and operations in the Collections Management office.		
Christina Moon	BA Candidate	Rutgers University	5/29/1999 to 8/8/1999
	The nondestructive analysis of 250 million-year-old Ophiacodon fossils from Texas using computed tomography (CT) scanning.		
Caren Oberg	MA Candidate	George Washington University	1/5/1999 to 4/30/1999
	Research literature on museum learning, exhibit development, audience evaluation, and new media technologies in order to compile a select bibliography of literature recommended for participants on all exhibit teams at National Museum of Natural History.		

Courtney O'Callaghan	BA Candidate Projects dealing with photographs of North American Indians—both for the Handbook project and research projects of supervisor.	University of California—Davis	6/23/1999 to 9/17/1999
Alison Olcott	BA Morphometric analysis of Instars in Ostracodes through the Phanerozoic.	University of Chicago	6/17/1999 to 9/1/2000
Nancy Olivares	BA Candidate The mathematical analysis of the eruptive patterns of an active volcano (Arenal Volcano, Costa Rica).	University of Missouri—Columbia	1/4/1999 to 1/18/1999
Clinton Olive II	PhD Candidate Editing of Funding Aids for the National Anthropological Archives.	University of Texas—Arlington	10/5/1998 to 6/30/1999
Hernan Ortega	MA Lower Urubamba biodiversity program Smithsonian Institution Man and Biodiversity program. Fishes of Lower Urubamba, Cusco-Ucayali, Peru.	Universidad Nacional San Marcos	6/15/1999 to 7/3/1999
Jennifer Ososky	BA Candidate Anatomy of carnivores.	Illinois State University	5/27/1999 to 8/18/1999
Serafine Poyer	High School Degree Candidate Volcanological training and translation.	Maison d'Education de la legion d'Honneur	2/15/1999 to 5/15/1999
Victoria Poyer	High School Degree Candidate Volcanological training and translation.	Maison d'Education de la legion d'Honneur	2/15/1999 to 5/15/1999
Jennifer Quincey	BA Candidate Analysis of Labrador archaeological collections: site reports and analysis of radiocarbon dating program.	Northern Illinois University	5/29/1999 to 8/8/1999
Rut Rivera	BA Candidate A key and morphological digest for the bats of Puerto Rico.	University of Puerto Rico	5/29/1999 to 8/8/1999
Jacqueline Robinson	MA Candidate Conduct research on health challenges in Africa for the "African Voices" exhibition. The goal of the internship is to produce a working outline of stories and an annotated bibliography for the stories.	University of Wisconsin —Milwaukee	7/12/1999 to 8/27/1999
Shelina Sayani	Participation in work on geographic information systems projects and computer mapping for scientific staff at National Museum of Natural History.		6/2/1999 to 7/31/1999
Jennifer Schade	High School Degree Candidate Collecting, assisting Gary Hevel, maintaining insect trays and jars.	Urbana High School	9/3/1999 to 3/1/2000
Tawny Seaton	BA Descriptive and functional analysis of the beaked whale postcranial skeleton.	California Lutheran University	5/29/1999 to 8/8/1999
Jocelyn Sessa	BA Candidate Study of mid-Cretaceous age climate and ocean change using planktonic foraminifera abundance change and stable isotopic signatures.	State University of New York—Geneseo	5/29/1999 to 8/8/1999
Jennifer Skene	BA Candidate Work on the Felipe Poey project. The goal of this project is to identify materials on the nineteenth-	Brown University	12/22/1998 to 1/22/1999

century natural historian Felipe Poey (1799–1891) in conjunction with development of an exhibition at National Museum of Natural History in celebration of the 200th anniversary of Poey's birth.

Rebecca Snyder	MA Candidate	George Washington University	3/19/1999 to 8/31/1999
	Development of a virtual skeleton of Triceratops and other dinosaurs. Applying surface and computed tomography (CT) scanning technology to digitize the morphology of dinosaur bones and assemble them virtually.		
Sergio Solari	MA	University of San Marcos	6/15/1999 to 7/3/1999
	Diversity and ecology of the Lower Urubamba region: small mammals of Camisea, Cusco, Peru.		
Sarah Soloman	BA Candidate	Appalachian State University	5/29/1999 to 8/8/1999
	Work out and document morphological differences between two cryptic species, both formerly thought to comprise the fungus-growing ant species <i>Cyphomyrmex longiscapus</i> .		
Jason South	BA Candidate	University of Chicago	6/14/1999 to 8/31/1999
Katie Spiker	BA Candidate	Elon University	5/24/1999 to 6/1/1999
	Stable isotope research on seventeenth-century human skeletons from Maryland and Virginia to determine place of origin and nutritional condition.		
Emma Stofel	BA	University of Oklahoma	5/10/1999 to 7/9/1999
	Preparing Northeast and Southeast Indian collections for rehousing and preparing African Hall exhibits.		
Adrian Sutter	BA Candidate	Macalester College	6/1/1999 to 8/30/1999
	Data entry and library cataloguing.		
Monica Terry	BA	Central Michigan University	9/13/1999 to 12/31/1999
	Work of geographic information systems projects for scientific visualization and analysis of ongoing studies within the Natural History Museum.		
Amanda Thompson	BA Candidate	University of Memphis	1/4/1999 to 1/18/1999
George Varas	BA Candidate	State University of New York –Stony Brook	1/4/1999 to 1/18/1999
Arwen Vidal	BA Candidate	California State University –Northridge	5/29/1999 to 8/8/1999
	The eruptive patterns of Arenal volcano from 1993 to May 1999; and analysis of seismic records.		
Laura Viney	BA Candidate	Mary Washington College	5/11/1999 to 7/22/1999
	Office of Education Discovery Room, Discovery Cart Program—Develop and test hands-on activities for National Museum of Natural History.		
Michael Walczak	MA Candidate	George Washington University	5/17/1999 to 8/13/1999
	Prepare an emergency preparedness manual for the Paleobiology department, while learning the “goings on” of the museum.		
Moritz Weinbeer		University Wuerzburg	11/3/1998 to 11/23/1998
	Continuing his Research Training Program project begun during the summer.		
Johnas Wright	BA Candidate	George Mason University	5/29/1999 to 8/8/1999
	Comparative analysis of the development of the tentacular club in paralarval squids, as well as SEM sucker comparison in paralarval octopods.		
Andrea Wuenschel	BA Candidate	Whitman College	6/7/1999 to 8/6/1999
	Nomenclature research of museum collection records for the checklist of freshwater fishes of Guyana.		

Layla Wuthrick	BA Candidate Working on photographic research relating to North American Indians—some of which is for the Handbook project.	Drew University	6/14/1999 to 8/24/1999
Jennifer Young	BA Taphonomic and paleoecological analysis of terrestrial paleocommunities—quantitative approaches.		6/14/1999 to 9/1/2000

### *National Museum of the American Indian (CRC)*

Shana Bushyhead	MA Candidate Collections management/registrars work.	University of Delaware	6/7/1999 to 8/13/1999
Katharine Gehron	BA Candidate Helping with publications; research for information on tribe and myth of children's book, to be put at end of the book; photo research for National Museum of the American Indian book to be published with museum opening ( <i>The Native Universe</i> ).	Cornell University	6/16/1999 to 8/23/1999
Audrey Harrison	BA Candidate Conservation of objects that are traveling. Examination and condition reports, treatment proposals, photo documentation, packing, and mounting.	University of Arizona	6/7/1999 to 8/13/1999
Abby Kliger	MA Candidate Develop a hybrid, portable exhibit for programs and participate in the development of study collections, which will be on display at the museum.	University of the Arts	6/7/1999 to 8/13/1999
Elynor Lord	High School Degree Candidate Assist public affairs office with general duties related to media outreach. Assist with additional clerical duties related to National Museum of the American Indian ground breaking, as well as develop a project that examines the advertising practices of cultural institutions of similar size and budget to National Museum of the American Indian.	East Chapel Hill High School	6/22/1999 to 8/6/1999
Lisa Madeira	MA Candidate	George Washington University	1/11/1999 to 4/8/1999
Elsa Mamani	BA Candidate Student assistant in Alicia Gonzalez's project in Pacific Coast of Mexico.	Universidad Nacional de Salta	2/8/1999 to 5/18/1999
Cecilia Manosa	MA Candidate Developing a print and electronic publication, "Starting a Tribal Museum."	University of Kentucky	6/7/1999 to 8/19/1999
Kimberlee McGrath	BA Candidate Traditional Care Database; Excel and Microsoft data entry concerning the collections and working with tribal community leaders in direct contact with objects in the collections.	Bucknell University	6/7/1999 to 8/13/1999
Melinda McPeck	BA Assisting in the conservation of collections at the Cultural Resources Center in Suitland, Maryland.	College of William and Mary	9/7/1999 to 9/7/2000
Adelina Morales	BA Candidate Anthropological research in Curatorial Department.	University Veracruzana	9/20/1999 to 8/21/2000
Betzabe Rivera	BA Candidate Anthropological research in Curatorial Department.	University de Panama	9/20/1999 to 12/10/1999
Adelina Suzan	BA Candidate Anthropological research in Curatorial Department.	Universidad Veracruzana	9/20/1999 to 12/10/1999



*National Portrait Gallery*

Shellyn Camacho	BA Candidate Assist the public program director with the Cultures in Motion public programs, program notes, and film series.	Brigham Young University	5/3/1999 to 8/12/1999
Erica Chutuape	BA Candidate Assist Roland White in the organization and filing of slides, videotapes for a recorded library.	Northwestern University	7/6/1999 to 8/17/1999
Elizabeth Crow	BA Candidate Research duties in preparation for upcoming volumes on the children of Charles Willson Peale; various filing and light editorial-related tasks. Read and classify newspaper articles and diary excerpts from Charles Willson Peale and his family.	University of Maryland –College Park	2/5/1999 to 5/15/1999
Jessica DuPlaga	BA Candidate Organization for closedown, label printing and mounting, screen-printing.	College of Wooster	6/7/1999 to 8/20/1999
Harriet Gettys	BA Candidate Updating the data on portraits acquired for the National Portrait Gallery's permanent collection over the past four years, as well as correcting data for earlier acquisitions, in anticipation of publishing a new edition of the National Portrait Gallery Permanent Collection Illustrated Checklist.	University of the South	6/3/1999 to 7/30/1999
Rachael Geyer	BA Candidate Research Assistant—Intern will assist staff in research for upcoming volumes to focus on the children of Charles Willson Peale, specifically Titian Ramsay Peale. Intern will be asked to do extensive newspaper/journal research, transcripts, and annotations.	Smith College	6/3/1999 to 8/12/1999
Marsha Gordon	PhD Candidate Work on exhibition and book called " <i>Star Quality: The Golden Age of the Silver Screen.</i> "	University of Maryland –College Park	9/8/1999 to 6/30/2000
Nerissa Lynn Holder	BA Candidate Directory/Catalogue work; compile photos: label, sequence, organize, layout, and crop.	Wellesley College	7/6/1999 to 8/31/1999
Aleem Hossain	BA Candidate Researching for the "Notable Americans" exhibition.	University of Chicago	6/21/1999 to 8/27/1999
Kyle Hustedt	BA Candidate Labels and silk-screening labels for exhibits of Edward Sorel.	Luther College	6/7/1999 to 8/6/1999
Jeremy Korch	BA Candidate Assists staff in editing data on the Collections Information System; organizing and researching portrait material; entering new portrait information on the collections database; scanning slides and photographs; and linking digitized images to records.	University of Wisconsin –Madison	6/1/1999 to 8/15/1999
Elizabeth Marquardt	BA Candidate Research on Rembrandt Peale's porthole portrait of George Washington in the 1850s, culminating in an academic report on the history of portraits and a checklist of extant "portholes."	University of Chicago	6/21/1999 to 8/27/1999
Andrea Marrone	BA Candidate Work in the catalog of American portraits as research assistant using CEROS and database to compile information.	University of Virginia	6/1/1999 to 8/13/1999
Megan McIntyre	BA Candidate Working on an exhibit that will travel to the Condon National Portrait Gallery. It will be an exchange of photographs of important Americans.	Smith College	9/7/1999 to 12/17/1999

Amanda Norman	BA Candidate Artistic career of Rembrandt Peale and government career of Benjamin Peale.	Smith College	9/7/1999 to 12/17/1999
Katharine Ristow	BA Candidate Retrieves and reviews color transparencies of selected collections objects; labels and CTS records in database; sends CTS to vendor for scanning; reviews CDs of scanned images; records CD image information and copyright data in database; converts, manipulates, and links images to database records.	Purdue University	6/21/1999 to 8/20/1999
Brandon Seitz	BA Candidate Assist the public program director with the Cultures in Motion public programs, program notes, and film series.	Purdue University	5/24/1999 to 7/30/1999
Kimberlee Staking	BA Candidate The focus of this internship will be exhibition and collection research in the National Portrait Gallery's Department of Photographs.	University of Maryland -College Park	2/1/1999 to 6/1/1999
Beverly Stautz	BA Candidate Scanning and image enhancement of slides and prints from National Portrait Gallery collections and from CAP using different formats to link to National Portrait Gallery Collection Search and National Portrait Gallery Collections System. Develop a systematic approach to scanning and tracking digital images.	Corcoran College of Art and Design	2/2/1999 to 5/30/1999
Patricia Summa	BA Working on publicity and press materials for National Portrait Gallery exhibitions and programs.	University of Bannberg	9/16/1999 to 12/3/1999
Misty Thompson	AA Candidate Assist and oversee living history program "Augustus Washington: An Inage of Liberty" in conjunction with "A Durable Momento: Portraits by Augustus Washington, African American Daguerreotypist." Assist with NPG programs such as October 17, 1999, open house, teacher workshops and lunchtime lectures.	Montgomery College	9/21/1999 to 12/17/1999
Elizabeth M. Tobey	PhD Candidate I will be assisting in the cataloguing of the prints and drawings collection at the NPG, as well as helping to research works in an upcoming exhibition of twentieth-century portrait drawings.	University of Maryland -College Park	5/26/1999 to 8/13/1999
Stephanie Tomayko	BA Candidate Design support work on three exhibitions (E. Sorel, A. Washington, and Henri Cartier-Bresson) and design planning for the Patent Office Renovation.	Syracuse University	6/7/1999 to 8/20/1999
Jennifer Ward	BA Inventory video tapes, motion picture films, and audio tapes. Ascertain content and transfer info onto database.	University of Maryland -Baltimore County	10/13/1998 to 12/1/1998
Sarah Wheeler	BA Assists staff in editing and entering data on collections database; organizing and researching portrait material; scanning slides and photographs; linking digital images to database; and updating Web site using HTML.	Smith College	9/13/1999 to 12/3/1999
Betsy Wheeler	BA Candidate Assist with biographical research, writing first drafts and help with educational videos.	Middlebury College	9/13/1999 to 12/14/1999
Elizabeth Wiley	PhD Candidate To assist Portrait Gallery historian Amy Henderson in researching the connections between portraits and the evolution of movie personalities.	George Washington University	1/19/1999 to 5/13/1999

*National Postal Museum*

- Allison McKittrick BA Candidate Miami University 6/14/1999 to 8/13/1999  
Research individuals who have been featured on stamps. This research will contribute to a new series of changing exhibits in the National Postal Museum's Philatelic gallery.
- Terry Pritchard BA Candidate State University of New York–Buffalo 5/24/1999 to 8/6/1999  
Perform academic research concerning the history and operation of the colonial (British) Post Office and the U.S. Post Office during the American Revolution and early national period.
- Mindy Simonson BA Candidate University of California –Santa Barbara 6/24/1999 to 8/26/1999  
Conduct photo and architectural research for an upcoming book on New Deal post offices. Also research the photo collections of maritime museums nationally in preparation for an upcoming steamboat exhibition at the National Postal Museum.

*National Zoological Park*

- Daphne Bremer PhD Candidate Tufts University 6/7/1999 to 8/13/1999  
Veterinary medicine internship with the Department of Animal Health.
- Julie Holleman BA Candidate Duke University 5/17/1999 to 8/6/1999  
Internship in the Nutrition Lab studying the nutrition of desert tortoises and the protein content of the plants they eat.
- Keya Jenkins BA Candidate University of Maryland –College Park 6/7/1999 to 8/13/1999  
The analysis of raven DNA. I will be working with Kevin Omland in the Genetics Lab of the National Zoo. We will be gathering feather, feces, etc., samples from ravens from all over the world to sequence their DNA and distinguish between the different species of ravens.
- Charyn Micheli BA Candidate Pontifical Catholic University of Puerto Rico 6/7/1999 to 8/13/1999  
The project will consist of working to develop research proposals with a conservation focus for the Delmarva fox squirrel, a local endangered species, and organizing the strategic planning meeting.
- Bonard Molina AA Candidate Montgomery College 1/21/1999 to 7/30/1999  
Working with the Amazonia Gallery Genetics Lab in interacting with visitors.
- Sally Pyle MA Candidate University of California–Davis 6/7/1999 to 8/27/1999  
Nutrition Research, Desert Tortoise Project.
- Eric Reinhard BA Candidate Pennsylvania State University 8/1/1999 to 11/1/1999  
The Golden Lion Tamarin Free-Ranging Program desires to educate the public about conservation, to conduct research to better understand the process of reintroduction, and to familiarize a pair for reintroduction into Brazil.
- Katharine Roback BA Candidate University of Massachusetts –Amherst 6/8/1999 to 8/28/1999  
Research for Desert Tortoise Project.
- Lindsey Savage Virginia-Maryland Regional College of Veterinary Medicine 5/17/1999 to 8/6/1999  
Literature search on the nutritional requirements of newborn mammals and investigating the nutrition of desert tortoises.
- Rebecca Stewart AA Edmonds Community College 8/9/1999 to 10/29/1999  
Redesign and move the African American and Native American Heritage Gardens.

- Elizabeth Wood MA Candidate George Washington University 1/10/1999 to 6/1/1999  
Researching cultural stories for an exhibition on the domestication of rabbits.
- Shannon Zack BA Candidate George Mason University 5/20/1999 to 8/20/1999  
Updating the CCS Web site concerning the videoconferencing project. Also involved in the videoconferencing project by contacting interested people and building a participant base. Involved in the Visitor Education Program and will be compiling a Cheetah Ethogram from others along with CCS' current research.

### *National Zoological Park—Friends of the National Zoo*

- Sarah Flaherty BA Duke University 8/23/1999 to 12/31/1999  
*Zoogoer* magazine science journalism intern.
- Cesar Augusto Loayza BA Candidate University of Maryland 6/2/1999 to 8/15/1999  
—Baltimore County  
Sequencing DNA for shrews. Mission is to find variability in the alleles and to find mutations.
- Maureen McClung BA Candidate Hendrix College 6/8/1999 to 8/31/1999  
Research and evaluate the National Zoo's current browse program; look for ways to improve its state.
- Danielle Sanders BA Candidate University of Miami 6/7/1999 to 8/13/1999
- Christina Wu BA Candidate University of Maryland 6/8/1999 to 8/20/1999  
—College Park  
Assist in the Human Resources office with daily operations. Update and maintain personnel files and current personnel forms. Create employee name badges, assist with employee functions, and develop a training model for hourly employees.
- Timothy Stoddard BA Boston University 6/14/1999 to 8/23/1999  
Researching and writing an article for the FONZ magazine, *ZooGoer*.

### *Office of Contracting*

- Michael Hutchinson MA Candidate George Washington University 5/24/1999 to 8/30/1999  
Intern will be involved in interviewing museum staff about projects and assessing contract needs; drafting and reviewing contracts and contract amendments, and providing research on contracting, intellectual property, and insurance law issues related to Smithsonian contracts.

### *Office of Development*

- Janet Haws BA Candidate College of William and Mary 6/24/1999 to 8/13/1999
- Kimberly Keller MA Candidate Indiana University 5/24/1999 to 8/30/1999
- Sarah Kim BA Candidate Pennsylvania State University 6/21/1999 to 8/13/1999  
1. Update Women's Committee members' database, 2. Help updating and mailing of SWC handbook to Active and Resource members, 3. Log in year 2000 grant proposal, 4. Log in craft show applications.
- Atinuke Ogunde AA Candidate Montgomery College 2/4/1999 to 5/31/1999  
Assist in preparing for the 1999 Arts and Crafts Show computer work, communicating with exhibitors and more.
- Kimberley Williams BA Candidate George Washington University 1/22/1999 to 4/30/1999  
Assisting with the planning of a trip/tour to London for some of our contributing members to the Smithsonian Institution.

*Office of Exhibits Central*

Alison Bassler	BA Candidate Learn about paint finishes and help with exhibit design.	Roanoke College	6/7/1999 to 8/15/1999
Briar Levit	BA Candidate Working with the Design Department of the Office of Exhibits Central.	San Francisco State University	6/7/1999 to 8/15/1999
Victor Manansala	BA Candidate Microbes exhibition production of 3-D forms to create form material to be installed in the International Gallery.	Howard University	1/28/1999 to 5/31/1999
Mike Ritter	BA Candidate Working in the Graphics Department on the visual representation of exhibits.	Bowdoin College	6/1/1999 to 8/6/1999
Ben Schwantes	BA Candidate Working in the model office in construction of models and design/construction of exhibits. I will also be working with the Office of Exhibits Central model makers on the use of museum brackets and display design.	University of Pittsburgh	6/1/1999 to 8/5/1999
Jenifer Scott	BA Candidate Producing 3-dimensional models of microbes for upcoming exhibition in the International Gallery.	Howard University	1/28/1999 to 5/31/1999
Sammy Shin	BA Working in the Model Shop.	University of Michigan	8/17/1999 to 11/17/1999
Victoria Sumner	BA Candidate Microbes exhibition; produce 3-dimensional forms to be installed in the International Gallery.	Howard University	1/28/1999 to 5/31/1999

*Office of Human Resources*

Ernestine Jefferson	New Leaders Program Working on devising a training course with staff.		11/9/1998 to 12/18/1998
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*Office of Imaging, Printing and Photographic Services*

Hatty Frampton	BA Candidate Photographic editing services for Smithsonian Collections and Displays.	Durham University	7/6/1999 to 9/15/1999
Abigail Haskell	BA Candidate Web development for the Photo Services department.	Georgetown University	11/19/1998 to 5/31/1999
Shoko Ito	BA Candidate Photograph scientific collections with either traditional photographic equipment or digital cameras. Perform traditional darkroom skills and digital darkroom using electronic imaging software to increase intern's knowledge base of both traditional and digital photographic practices.	Trinity College	6/1/1999 to 7/30/1999
Alissa Kempler	High School Degree Candidate	Georgetown Day High School	6/8/1999 to 9/8/1999
Matthew Lebeda	BA Candidate Work on database.	Rochester Institute of Technology	6/15/1999 to 9/1/1999
John Marshall	PhD Candidate Will assist on various shooting assignments, sometimes moving heavy equipment. Will also assist in lab assignments, processing, printing, reproduction, and digital applications. Will learn techniques in all above skills as well as studio and on-location lighting.	Webster University	2/1/1999 to 5/31/1999

Shanna Moore	BA Candidate Assisting in digitizing photo archives with D. Hurlbert at the Office of Imaging, Printing, and Photographic Services.	Portland State University	1/6/1999 to 3/12/1999
Anna Leah Overstreet	BA Working in the darkroom, working on photo shoots.	Furman University	6/14/1999 to 12/31/2000
Svea Lin Rodgers	BA Scanning and organizing slides for Biodiversity database.	University of Montana —Missoula	11/19/1998 to 2/22/1999
Ember Ward	BA Candidate Assisting in photographing various exhibits at different museums and transferring those images to QuickTime so that they can be accessed three dimensionally over the Internet.	University of California —Berkeley	6/3/1999 to 8/1/1999
Kendra Che Weaver	AA Candidate Assisting Office of Imaging, Printing and Photographic Services photographers with wide range of photographic tasks, including location and studio shooting assignments, event documentation, copying old photographs and books, digital imaging, and black-and-white printing.	Randolph Community College	10/23/1998 to 12/18/1998

### *Office of Information Technology*

Matthew Delco	BA Candidate	Portland State University	10/1/1998 to 12/4/1998
Stephanie Nobert	BA	Barnard College	5/24/1999 to 9/15/1999

### *Institutional Studies Office*

Nicole Barone	BA	James Madison University	10/13/1998 to 5/1/1999
Abigail Dreibilis	BA Candidate Survey and interview visitors to National Portrait Gallery and other various museums. The goal is to determine visitor experience and satisfaction.	Indiana University of Pennsylvania	5/24/1999 to 7/16/1999
Madeleine LeBlanc	PostDoc Be part of a study directed to understanding the visitor experience and measuring the degree of fit between what the museum provides and what the visitor experiences.		2/1/1999 to 4/23/1999
Sarah Vollman	High School Degree Candidate	Richard Montgomery High School	7/6/1999 to 7/30/1999

### *Office of Public Affairs*

Jennifer Adams	BA Writing articles for <i>The Torch</i> newspaper.	Lenoir-Rhyne College	6/11/1999 to 7/23/1999
Amy Givens	BA Candidate Intern will be working on <i>The Torch</i> .	Roanoke College	1/21/1999 to 4/25/1999

### *Office of Smithsonian Institution Archives*

Jennifer Gunter	MA Candidate To work with the Records Management Team to survey and inventory a portion of the records of the Freer/Sackler Gallery. The focus of the project will be to complete and annotated inventory of the central files and begin to survey the active records of Milo Beach.	University of Maryland —College Park	7/7/1999 to 8/20/1999
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Jennifer Insley	BA Candidate Research on the history of the Smithsonian Institution in preparation for digitizing of historical and legal documents.	University of Chicago	6/21/1999 to 8/27/1999
Tanya Marshall	BA Access and preservation of Smithsonian Web sites.	University of Maryland -College Park	7/12/1999 to 8/20/1999
Jeremy Skinner	BA Candidate Working with information file and research file.	Lewis and Clark College	5/24/1999 to 7/30/1999

### *Office of Sponsored Projects*

Christine Black	High School Degree To refurbish the Office of Sponsored Projects Web sites.	Wakefield High School	7/26/1999 to 9/3/1999
Katherine Fritzsche	MA Candidate Provide assistance in locating funding; developing grant proposals and administering awards.	George Washington University	8/31/1999 to 6/30/2000
Adisra Jittipun	BA Candidate	George Mason University	9/2/1999 to 12/21/1999
Kimberly Keller	MA Candidate	Indiana University	6/1/1999 to 8/30/1999
Peter Molfese	High School Degree Candidate Development of an internal Web site for Office of Sponsored Projects.	Carbondale Community High School	3/15/1999 to 3/19/1999
Bridget Neal	MA Candidate Preparing the annual report on training and intern activities, assisting in development and maintenance of grant management database systems, and providing administrative assistance in preparing for Office of Sponsored Project's annual planning retreat.	Tulane University	6/3/1999 to 8/13/1999

### *Office of the General Counsel*

Heather Gottry	Juris Doctor Candidate Assist in legal research on variety of matters and cases pending in the office, write memos, etc.	Georgetown University Law Center	10/21/1998 to 6/1/1999
Leonardo Graffi	BA Candidate	University of Bologna	7/16/1999 to 9/15/1999
Mitchell Tuchman	MA Candidate Perform legal research and prepare memoranda in multiple areas of the law, such as employment, trust, tax, and federal jurisdiction. Assist in litigation, including preparation of pleadings and discovery. Provide additional assistance as required.	American University	5/24/1999 to 7/31/1999

### *Smithsonian Institution Traveling Exhibition Service*

Altavia Ray	BA To serve as public relations assistant focusing on researching, writing, and disseminating press releases and information regarding several upcoming exhibitions.	Howard University	2/22/1999 to 6/22/1999
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### *Smithsonian Administration*

Megan McArdle	BA Candidate Assist in editing/scanning work for Millennium Project Web site.	University of Virginia	5/25/1999 to 8/30/1999
Ambika Sankaran	BA Candidate Working on the Millennium Web site project; including archives, filmography, technical support, and research.	Hood College	5/25/1999 to 1/31/2000

*Smithsonian Center for Materials Research and Education*

- Sarah Ginn BA Santa Clara University 6/28/1999 to 8/6/1999  
Using neutron activation analysis to determine the element compositions of ceramic materials from Mission Santa Clara in Santa Clara, California. The main research goal is to trace the trade roots of the California missions.
- Mary Studt MA Buffalo State College 10/5/1998 to 5/31/2000  
Fellow in archives conservation to be working with paleobiology, entomology, and Smithsonian archives on survey, rehousing and treatment of their archival collections.

*Smithsonian Environmental Research Center*

- Gaddiel Ayala BS Candidate Universidad Metropolitana 6/3/1999 to 8/20/1999  
Environmental Education Program and installation and operation of weather stations.
- Dina Berrin BS Oberlin College 6/15/1999 to 9/7/1999  
Invasions Ecology: This project measures patterns of nonindigenous species transfer, invasions, and impact; tests specific and general mechanisms that underlie these patterns; and assesses the efficacy of management strategies to limit the spread and impact of nonindigenous species.
- Carissa Capuano BS Candidate Bowdoin College 6/1/1999 to 8/30/1999  
Fish and crab biology and ecology.
- Andreas Held BS Candidate University of Bayreuth 6/1/1999 to 8/20/1999  
Forest ecology and micrometeorology; forest canopy tower measurements.
- Michelle Hersh BS Candidate Bryn Mawr College 6/1/1999 to 8/20/1999  
Assisting with a continuing study of plant physiology and biogeochemical cycling in elevated CO<sub>2</sub> chambers in a tidal salt marsh. Answering questions such as "How do plants respond to elevated CO<sub>2</sub> levels?" and "What happens to the additional carbon dioxide put into the system?"
- Alexandra Hui BS Candidate Pomona College 6/1/1999 to 8/20/1999  
Forest Canopy Lab; Studies of structure and meteorological dynamics of the Maryland deciduous forest canopy.
- Alex Kalejs BS Johns Hopkins University 3/1/1999 to 5/29/1999  
Assist in production of "Tales of the Blue Crab" exhibition for schools. Assist in school group programs including canoes, boats, and trails.
- Jae-Seong Kim BS Kunsam National University 6/1/1999 to 8/20/1999  
Marine planktonic ecology and identification of marine protist.
- Kristen Larson BS Candidate St. Mary's College of Maryland 6/1/1999 to 8/20/1999  
Long-term studies of crabs and fish in Rhode River.
- Danielle Lipski BS University of Maryland  
—College Park 1/5/1999 to 4/26/1999  
Research on the introduction of marine invasive species by ballast water from ships arriving in the Port of Baltimore.
- Jesse Marsh BS Boston University 6/1/1999 to 8/20/1999  
Working in the Crab Lab on long-term studies of fish/crab population dynamics.
- Melanie Moses BA University of Maryland  
—College Park 9/13/1999 to 12/30/1999  
Internship in the Smithsonian Environmental Research Center Forest Canopy Lab. Collect data on the optical properties of leaves and use that data to modify computer models describing canopy structure.



Kathleen Murphy	BS		2/8/1999 to 5/30/1999
	Investigations of ballast water sampling methodologies and the impact of plankton behavior on representative sampling.		
Mark Nabong	BA Candidate	University of Chicago	6/20/1999 to 8/27/1999
Kelly O'Malley	Researching orchid fungal interactions.		9/15/1999 to 12/24/1999
J. Paul Richardson	BS Candidate	Old Dominion University	1/5/1999 to 3/26/1999
	Working with invasive marine organisms.		
Laura Schreeg	MA Candidate	Michigan State University	6/1/1999 to 8/20/1999
	Dendroecological and ecophysiological analysis of gap and non-gap environments in deciduous and evergreen understoreys at the Smithsonian Environmental Research Center.		
Ben Spence	MA	Louisiana State University	6/21/1999 to 8/13/1999
	Germination and growth of native terrestrial orchids and the role of mycorrhizal fungi in this process.		
Jason Stuck	BS Candidate	Warren Wilson College	6/1/1999 to 8/20/1999
	Assist teacher-led field trips at Reed Education Center and lead guided canoe trips on Muddy Creek and guided hikes on Java History Trail and the Discovery Trail.		
Erin Turack	BS	University of Kansas	2/1/1999 to 4/9/1999
	Researching the optical properties of phytoplankton on the Rhode River, a sub-estuary of the Chesapeake Bay, and presenting the implication of water quality to the public.		
Karma Vowell	BS	Indiana University	5/24/1999 to 8/13/1999
	Modeling of Riparian structure effect on buffering intensity.		
David Welch	MA Candidate	Indiana University	5/10/1999 to 7/30/1999
	Empirical models for stream water nutrient concentrations in the Patuxent River drainage basin.		
Corey Wright	BS Candidate	Warren Wilson College	5/27/1999 to 8/14/1999
	Looking at effects of ultraviolet radiation on bacterioplankton in Rhode River and Gulf of Mexico.		
Laura Yip	BS Candidate	University of Victoria	4/26/1999 to 7/16/1999
	Environmental education.		

### *Smithsonian Institution Libraries*

John Lee Curtis	BA Candidate	Furman University	6/11/1999 to 8/13/1999
	Production work for the libraries' Digital Editions. Work will include materials handling, inventorying, database maintenance, digitizing with a flatbed scanner and scan back camera, creation of long-term storage CD-ROMs and production of derivative images for World Wide Web use.		
Agnieszka Koszowska	Library of Congress Soros Program; covers a training portion at the Library of Congress and an opportunity to work in the Smithsonian Institution Libraries, Department of Acquisition.		3/29/1999 to 5/14/1999
Roxanne Missingham	To investigate the services offered by libraries and the information needs of researchers and curators, particularly as relates to how to implement new digital services.		7/12/1999 to 8/9/1999
Erin Tyburski	BA	Johnson State College	10/5/1998 to 10/30/1998
	Burpee Seed Collection—writing finding aid.		

*Smithsonian Magazine*

Naila-Jean Meyers      BA Candidate      Northwestern University      6/7/1999 to 8/6/1999

*Smithsonian Office of Education*

Holly Barton      BA Candidate      University of Texas—Austin      6/14/1999 to 8/10/1999  
Assisting in planning summer teacher seminars, Teacher's Night, and other tasks.

Elizabeth Corkery      Assisting in Teachers' Night and multicultural programs.      9/14/1999 to 10/1/1999

Michelle Morton      PhD Candidate      University of California      6/7/1999 to 7/31/1999  
—Santa Cruz  
"Cultural Frontiers: Textiles of Northern Mexico and the Southwestern U.S." Joint project between Department of Anthropology and the Office of Education.

Marget Van Horn      MA Candidate      George Washington University      6/3/1999 to 8/6/1999  
Heritage Month Planning—Hispanic Heritage and Native American Heritage programs. Working on upcoming Teacher's Night and archive of Heritage Month events.

*Smithsonian Press*

Mary DeYoung      MA Candidate      Winthrop University      5/17/1999 to 8/13/1999  
The goal of this internship is to expose the intern to all facets of work in the acquisitions department of this publishing company. In that regard, she will be responsible for reviewing and assessing manuscripts, writing short summaries of manuscripts, reviewing manuscript submissions for completeness, contacting authors, rejecting manuscripts, and other duties as assigned.

*Smithsonian Tropical Research Institute—Panama*

Diana Ardines           Universidad Santa Maria      2/4/1999 to 2/4/2000  
la Antigua

Jose Atencia Avila      Comparative study of the invertebrate macro fauna      4/2/1999 to 4/2/2000  
Thalassia testudinum.

Elroy Charles      BA      University of Guyana      2/15/1999 to 2/15/2000  
Comparison of leaf-beetles of the canopy and understory in dry and wet forests.

Diana de Atenao           Universidad Santa Maria      4/2/1999 to 4/2/1999  
la Antigua  
Comparative study of the invertebrate macrofauna (Thalassia testudinum) that lives in aqueous sediment.

Megan Evans      High School Degree Candidate      Thomas Jefferson High School      7/2/1999 to 8/30/1999  
To assist with special projects.

Yolanda Figeroa           Universidad Santa Maria      7/1/1999 to 7/30/2000  
la Antigua

Grettehun Gonzalez      MA Candidate      Universidad de Panama      7/1/1999 to 9/30/1999  
Studying the prevalence of viral pathogens in wild vs. cultivated shrimp populations in Panama.

Amador Goodridge           Universidad Santa Maria      7/1/1999 to 7/30/2000  
la Antigua

Jennifer Kane           Brown University      9/15/1999 to 2/28/2000  
Molecular phylogeny of sea urchins: I will sequence the cytochrome oxidase I regions of the mitochondrial DNA genome of Trip.sea urchins collected throughout the Indo-West Pacific, Central

Pacific, and Caribbean. I will then deduce which group separated from each other and when, and reconstruct a phylogeny of Trip.

Jonathon Thomson	BA	University of Virginia	9/27/1999 to 12/20/1999	A survey of marine angierms and sediment regimes in the Bocas del Toro region of Panama.
Calvin Walker	BA	U.S. International University	6/14/1999 to 8/20/1999	Develop a strategy and operational plan for the bookstore. If time permits, also for Barro Colorado Island and housing units.

### *The Smithsonian Associates*

Perrin Anderson	BA Candidate	Duke University	6/14/1999 to 8/6/1999	Assist with program production, e.g. concert program, film, and camp programs.
Marika Athens	BA Candidate	Haverford College	5/17/1999 to 6/11/1999	Assist The Smithsonian Associates' performing arts team in a variety of ways.
Misty Bastian	BA Candidate	Brigham Young University	1/5/1999 to 4/15/1999	Support Domestic Tour Team in duties. Assist with various tasks that support the planning and implementation of study tours. Maintain the study tour leaders database.
Madeleine Bertin	BA	Smith College	1/19/1999 to 5/15/1999	Aid Performing Arts Department of The Smithsonian Associates in whatever capacities are needed, including writing, marketing, publicity, and administration.
Sonja Brandt	BA	Carnegie Mellon University	9/8/1999 to 12/31/1999	Working on projects to support Studio Arts and Young Associates divisions of The Smithsonian Associates; conduct market research to identify competition and compare program offerings; work to help enhance Studio Arts presence on Web site; update Studio Arts records and files; conduct extensive research on children's literature.
Christi Crovato	AA Candidate	Montgomery College	1/11/1999 to 5/31/1999	Assist in development of programs and implementing marketing strategy for The Smithsonian Associates' professional institutes. Research potential corporate clients and determine appropriate contacts. Prepare and send out letters of introduction. Assist in planning institutes, making arrangements for events, researching topics, and assembling packets and booklets.
Jenna Goldenberg	BA Candidate	University of Michigan	5/3/1999 to 7/2/1999	Supporting the U.S. and Canada Study Tours team with a variety of projects, including editing and proofing tour catalog copy, tour bulletins, and written materials; researching sites on the Internet, entering study leader profiles into the database, researching other parts of Smithsonian for links to the Study Tours.
Sonja Hayden	BA Candidate	University of North Carolina -Chapel Hill	5/18/1999 to 7/30/1999	Editing and proofing catalog copy, tour bulletins, and other written materials; researching sites of the Internet; entering study leader profiles in STS database; researching other parts of the Smithsonian for links to study tours.
Anna Kerns	MA Candidate	George Washington University	2/18/1999 to 4/30/1999	Assist in the coordination and design of Smithsonian Associates Study Tours and Seminars.
Magda Kuchudakis	AA Candidate	Montgomery College	9/1/1999 to 12/31/1999	Assist in the development of national outreach programs.

- Stacy Shintani BA Candidate University of California 6/29/1999 to 8/27/1999  
 -Los Angeles  
 Coordinate the Silent Auction for the 1999 Young Benefactors Blast-Off Black-Tie Gala. This entails tracking gift commitments, logging and labeling gifts received, following up with acknowledgments and thank-yous, providing progress reports, and other duties related to the Gala and Silent Auction as needed.
- Shannon Vance MA Candidate American University 3/1/1999 to 6/30/1999  
 Assisting with house management for Discovery Theater as well as office work and research.
- Hilary Welbourne BA Lycoming College 2/8/1999 to 7/30/1999  
 Competitive analysis of study tours in travel marketplace—including inquiry fulfillment processes and competitive tour offerings.

*Utilities Operation and Maintenance*

- Rose Coniglio MA Candidate George Washington University 6/14/1999 to 8/30/1999  
 Working on a water treatment systems project.

# Award Activity

The following table lists only those grants and contracts that were awarded to Smithsonian Institution offices and bureaus during fiscal year 1999. Ongoing grants and contracts that were originally awarded in previous fiscal years are not included here.

## Annual Report of Award Activities 1 October 1998–30 September 1999

Principal Investigator	Sponsor	Project Title	Amount Awarded	Project Purpose
Anacostia Museum				
Banks, Joanna	Freddie Mac Foundation	Lucy E. Moren Elementary School Partnership	35,000	Education
Willis, Deborah	Trellis Fund	Locating the Spirit: Religion and Spirituality in African American Art	15,000	Exhibition
Willis, Deborah	Nathan Cummings Foundation	Locating the Spirit: Religion and Spirituality in African American Art	15,000	Exhibition
		Subtotals:	65,000	3
Archives of American Art				
Dawson, Barbara	Abington Foundation	Inventory of William Mozart McVey Documents	10,000	Research
		Subtotals:	10,000	1
Center for Folklife and Cultural Heritage				
Kennedy, Richard	Henry Luce Foundation	Cultural Research, Documentation, and Conservation	120,000	Education
Kennedy, Richard	Asian Cultural Council	Tibetan Culture Beyond the Land of Snows Programs	8,000	Exhibition
Kurin, Richard	New Hampshire Culture Commission	Celebrate New Hampshire Culture Component —1999 Folklife Festival	377,110	Exhibition
Kurin, Richard	New Hampshire Culture Commission	Celebrate New Hampshire Culture Component —1999 Folklife Festival	72,370	Exhibition
Kurin, Richard	Rockefeller Foundation	A Global Assessment of the 1989 UNESCO Recommendation on the Safeguarding of Traditional Culture and Folklore: Local Empowerment and International Cooperation		
Kurin, Richard	National Park Foundation	America's Millennium—Honor the Past, Imagine the Future	10,000	Research
Seeger, Anthony		1989 UNESCO International Conference—Global Assessment of the 1989 UNESCO Recommendations on the Safeguarding of Traditional Culture and Folklore	438,830	Exhibition
		Subtotals:	1,036,310	7

Principal Investigator	Sponsor	Project Title	Amount Awarded	Project Purpose
Center for Materials Research and Education Baebien, Harriet	Kress Foundation	Archaeological Conservation Internship Program	18,000	Education
			Subtotals: 18,000	1
Center for Museum Studies Craig, Bruce Craig, Bruce	Nathan Cummings Foundation Bisbee Mining and Historical Museum (Affiliation)	Moving Online	40,000	Education
		Think Big Plan for Small Museums—Workshops	4,433	Education
			Subtotals: 48,464	3
Cooper Hewitt National Design Museum Clark, Ina	Montgomery Community College	NEH Seminar Series	4,031	Education
			Subtotals: 48,464	3
Freer Gallery of Art McCarthy, Blythe	New York State Council on the Arts	Andrew Carnegie Mansion Booklet	6,000	Other
			Subtotals: 6,000	1
Hirshhorn Museum and Sculpture Garden Benezra, Neal Benezra, Neal	US Dept of the Interior/National Park Service	Examination of Gilded Bronze Using Nondestructive Eddy Current Techniques	17,200	Research
			Subtotals: 17,200	1
Benezra, Neal Benezra, Neal Benezra, Neal Benezra, Neal	Fundacao Luso-Americana Peter Norton Family Foundation Andy Warhol Foundation for the Visual Arts Mondriaan Foundation Institut fur Auslandsbeziehungen	Directions Julio Sarmiento Regarding Beauty: A View of the Late Twentieth Century	16,854	Exhibition
		Regarding Beauty	25,000	Exhibition
		Regarding Beauty	35,000	Exhibition
		Regarding Beauty (Regarding Beauty) Pipilotti Rist (Regarding Beauty) Regarding Beauty: Rosemarie Trockel/Imi Knoebel	1,522 4,629 5,475	Exhibition Exhibition Exhibition
		Subtotals: 88,480	6	
National Air and Space Museum Campbell, Bruce	NASA/Goddard Space Flight Center	Planetary Remote Sensing: Linking Observations, Theory, and Field Studies	53,000	Research
		Radar Studies of the Lunar Regolith—Year 2	31,031	Research
Cook, Anthony	National Aeronautics and Space Administration Centre National De La Recherche Scientifique	CNRS—Geometry and Development of Fracture Zones in Relation to Dike Emplacement on Mars	2,300	Research

Cook, Anthony Govier, Victor	NASA/Headquarters National Aeronautics and Space Administration	Planet-Wide Digital Elevation Models of the Lunar Surface Faint Object Spectrograph (FOS) Exhibit Case—NASA	30,900 13,377	Research Exhibition
Maxwell, Ted	National Aeronautics and Space Administration	Geomorphic Analysis of the Martian Highlands	55,000	Research
Needell, Allan	US Dept of the Interior	Save America's Treasures—Artifacts of the Apollo Space Program	1,350,000	Exhibition
Scheffler, Elizabeth Scheffler, Elizabeth	Emil Buehler Trust US Dept of Transportation (IAT)	Support for the Dulles Center Capital Campaign Transportation Related Projects, Artifacts, and Research, Year 2	1,000,000 883,000	Other Other
Taylor, Mark	National Film Preservation Foundation	Millennium Project—Treasures of American Film Archives	10,264	Other
Watters, Thomas	Gertrude E. Skelly Charitable Foundation	NASA Web Site Development	45,000	Research
Watters, Thomas	National Aeronautics and Space Administration	Studies of Tectonic Features on Mars	29,600	Research
Watters, Thomas	National Aeronautics and Space Administration	Comparative Studies of Tectonic Features on the Terrestrial Planets	25,000	Research
Zimbelman, James	National Aeronautics and Space Administration	Evaluation of the Controlling Influence of Topography on the Replacement of Large Flow Fields	30,000	Research
Zimbelman, James	NASA/Goddard Space Flight Center	Evaluation of the Controlling Influence of Topography on the Emplacement of Large Flow Fields	17,000	Research
Zimbelman, James Zimbelman, James	NASA/Goddard Space Flight Center National Aeronautics and Space Administration	Regional Planetary Image Facility Topical Geological Mapping of Mars and Venus	39,000 22,000	Research Research
Zimbelman, James	National Aeronautics and Space Administration	Evaluation of the Paleoflood Hypothesis for Mars and Earth Through Investigation of Unconfined Fluvial Processes	47,500	Research
		Subtotals: 3,683,972		18
National Museum of American Art Allen, Rachel	National Endowment for the Arts	Archiving NEA's Visual Arts Program (Interagency Agreement—Third Phase)	430,000	Research
Broun, Elizabeth	Community Foundation for the National Capitol Region	Docent Programs at NMAA	9,000	Education
Broun, Elizabeth	Community Foundation for the National Capitol Region	Docent Programs at NMAA	13,925	Education
		Subtotals: 452,925		3
National Museum of American History Becker, Ronald Becker, Ronald	Polo Ralph Lauren Corporation US Dept of the Interior/National Park Service (IAT)	Star-Spangled Banner Preservation Project Star-Spangled Banner Preservation Project	9,800,001 3,000,000	Exhibition Exhibition

Principal Investigator	Sponsor	Project Title	Amount Awarded	Project Purpose
Clough, Camilla Finn, Bernard	Memphis Rock 'N' Soul, Inc. Sloan Foundation	Rock 'n' Soul Exhibition Projects "Electric Lighting" and "Alternative Methods of Power Generation"	308,741 136,275	Exhibition Exhibition
Hacker, Barton	US DoD/Department of the Army	U.S. Military Academy Exhibit	5,000	Exhibition
Kondratas, Ramunas	World Federation for Ultrasound in Medicine and Biology	Publication of World History of Medical Ultrasound	40,000	Research
Lubar, Steven	National Museum of Industrial History (Affiliation)	National Museum of Industrial History— Feasibility Study (Amendment No. 2)	10,000	Other
Molella, Arthur	Lemelson Foundation	Traveling Exhibition	2,500,000	Exhibition
Molella, Arthur	Lemelson Foundation	Hands On Science Center Collaboration	750,000	Exhibition
Shay, Wendy	National Film Preservation Foundation	Harry Carney and Western Union Collections	12,335	Exhibition
Shay, Wendy	National Film Preservation Foundation	Shoes on the Move	883	Other
Spieß, Katherine	Women's Museum: An Institute for the Future (Affiliation)	Feasibility Analysis	11,400	Other
Sturm, Gary	Federal City Council (Affiliation)	National Music Museum Feasibility Study	200,060	Other
Sturm, Gary	Federal City Council (Affiliation)	National Music Museum Feasibility Study/Year 2	197,925	Other
Turner, Steven	Chabot Space Science Center (Affiliation)	Feasibility/Cost Analysis Study	75,577	Other
Withuhn, William	B&O Railroad Museum	B&O Railroad Feasibility Study	4,588	Other
			Subtotals: 17,052,785	16
National Museum of Natural History Acevedo, Pedro	US Dept of Agriculture	Monocots of Puerto Rico and the Virgin Islands	5,000	Other
Acevedo, Pedro	US Dept of Agriculture	The Vines of Puerto Rico and the Virgin Islands	5,000	Research
Barse, William	Heinz Family Foundation	Initiating Household Archeology in the Orinoco: Test Excavations at Pozo Azul Norte-2, Amazonas State, Venezuela	7,780	Research
Bell, Deborah Crowell, Aron	National Institutes of Health ARCO Foundation	The Mounting of Herbarium Specimens Looking Both Ways: Heritage and Identity of the Alutiq People	2,835 5,000	Other Exhibition
Crowell, Aron	Alaska Humanities Forum/NEH	Looking Both Ways: Heritage and Identity of the Alutiq People	8,000	Exhibition
Dallmeier, Francisco	Keidanren Nature Conservation Fund	Forest Biodiversity Conservation and Monitoring in the Philippines		
Dallmeier, Francisco	Shell International	Biodiversity and The Camisea Project: A Legacy for Conservation and Development	45,755 145,000	Research Research



DePriest, Paula	National Science Foundation	Monographic Studies in the Cladoniaceae	150,000	Research
Dove, Carla	US Dept of the Air Force	Bird Aircraft Strike Hazard (BASH) Program—IAT	295,436	Other
Dove, Carla	US Dept of the Air Force	Bird Aircraft Strike Hazard (BASH) Program	45,000	Research
Dove, Carla	US Dept of the Air Force	Bird Aircraft Strike Hazard (BASH) Program	19,300	Research
Erwin, Douglas	Harvard University/NASA	The Planetary Context of Biological Evolution	4,184	Research
Erwin, Douglas	Harvard University/NASA	The Planetary Context of Biological Evolution	3,750	Research
Erwin, Douglas	Harvard University/NASA	The Planetary Context of Biological Evolution	931	Research
Fauchald, Kristian	National Science Foundation	Biological Collections from Polar Regions	249,872	Other
Fauchald, Kristian	US Dept of the Interior	Disposition of Biological Specimens from the Outer Continental Shelf	69,761	Research
Fitzhugh, William	Nippon Foundation	Opening Reception for the Exhibition Ainu: Spirit of a Northern People	49,500	Other
Fitzhugh, William	Nordic Council of Ministers	West Viking Exhibit	269,431	Exhibition
Fitzhugh, William	Nordic Council of Ministers	Viking: North Atlantic Saga	636,325	Exhibition
Fitzhugh, William	Japan-United States Friendship Commission	Catalogue to Accompany the Exhibit "Ainu-Spirit of a Northern People"	50,000	Other
Fitzhugh, William	US Dept of the Interior/National Park Service (IAT)	Assist in the Development of U.S.-Russian Exchanges, Research and Cooperative Programs	44,178	Other
Greene, Candace	US Dept of the Interior	Artwork Collection, National Anthropological Archives	228,664	Other
Heyer, W. Ronald	NASA/Goddard Space Flight Center	Amphibian Populations and Global Climates Meeting	10,639	Other
Homiak, John	National Film Preservation Foundation	Laboratory-Archive Partnership (LAP) Grant Agreement	2,500	Other
Homiak, John	National Film Preservation Foundation	Treasures of American Film Archives	14,754	Other
Krupnik, Igor	University of Alaska, Fairbanks/DOC/NOAA	Ecosystem Variability and Subsistence Hunting Pressure in the Bering Strait Area	71,250	Research
Laurance, William	Conservation, Food and Health Foundation, Inc	Floristic Changes in Amazonian Forest Fragments and the Effects of Soils on Plant Distributions	19,200	Research
Laurance, William	NASA/Goddard Space Flight Center	Anthropogenic Landscape Changes and the Dynamics of Amazonian Forest Bio Mass	241,659	Research
Luhr, James	US Dept of Energy	CD-ROM Access to the Global Volcanism Program: Targeted to the U.S. Geothermal Exploration Community	50,000	Research
MacPherson, Glenn	NASA/Goddard Space Flight Center	Isotopic, Petrologic and Trace Element Studies of Primitive Solar System Material	93,417	Research
Madeira, Joseph	Japan Foundation	Ainu: Spirit of a Northern People	88,118	Exhibition
Mathis, Wayne	National Science Foundation	PEET: Monographic Research in the Diptera	82,400	Research
McCoy, Timothy	NASA/Goddard Space Flight Center	Experimental Studies of Igneous Processes in Enstatite Meteorites	17,500	Research
McCoy, Timothy	National Aeronautics and Space Administration	Experimental Studies of Igneous Processes in Enstatite Meteorites	32,000	Research
McCoy, Timothy	National Science Foundation	RTP/AMP Partnership at the National Museum of Natural History	60,109	Other

Principal Investigator	Sponsor	Project Title	Amount Awarded	Project Purpose
Norenburg, Jon	George Washington University NSF	Bringing the Phylum Nemertea and its Taxonomy into the 20th and 21st Centuries	6,562	Research
Norenburg, Jon	George Washington University/NSF	Bringing the Phylum Nemertea and its Taxonomy into the 20th Century	59,620	Research
Norenburg, Jon	National Institutes of Health	Maintaining Voucher Collection of Marine Animals	9,999	Other
O'Reilly, Laurence	National Science Foundation	Wonders of Life: A Large Format Film	856,214	Other
O'Reilly, Laurence	National Science Foundation	Wonders of Life: A Large Format Film	1,034,929	Other
Osterman, Lisa	Texas A&M Research Foundation NSF	Paleogeography of Ocean Drilling Program: Antarctic Rise Sites 1095, 1096 & 1101	20,635	Research
Owsley, Douglas	Parsons Engineering Science, Inc.	Skeletal Analysis Consultation	7,500	Other
Pohwat, Paul	Bisbee Mining and Historical Museum (Affiliation)	Feasibility and Cost Analysis Study	3,667	Other
Rice, Mary	Link Foundation	Marine Science Fellowship Program	15,000	Other
Rice, Mary	St. Lucie School District	Developing a Collaborative Educational Program with St. Lucie County School Board	29,000	Education
Rostker, Heather	Ringier Rock Foundation	African Voices Project	2,500	Exhibition
Sikes, Nancy	Boise Fund	Floral Microhabitat Reconstruction at Olduvai Gorge by Stable Isotope Analysis of Paleosols	560	Research
Simons, Ross	National Science Foundation	National Museum of Natural History Research Training Program	76,200	Education
Stanley, Daniel	US Dept of the Interior	Compilation of Sediment Samples for a Morpho-Stratigraphic Study of the Rio Grande Delta System, Texas	3,000	Research
Stevens, Linda	Cafritz Foundation	The New Discovery Room	100,000	Education
Taylor, Paul	Chiang Ching-Kuo Foundation	Collections-Based Research and Field Studies for an Interpretive Catalog of Indigenous Taiwanese Ethnographic Collections	45,000	Research
Taylor, Paul	San Carlos Institute (Affiliation)	The Pichs Collection: Exploring Cuba's History Through Postal Stamps	12,480	Other
Wagner, Warren	US Dept of Agriculture, Natural Resources Conservation Serv	Vascular Plant Checklist Database	10,000	Other
Walsh, Jane	Miami Museum of Science	Smithsonian Expeditions: Exploring Latin America	72,470	Other
Wilson, Don	Homeland Foundation	Biological Dynamics of Forest Fragments Project	20,000	Research
Wilson, Don	US Environmental Protection Agency	Enhanced Training and Outreach: Biological Dynamics of Forest Fragments Project	150,000	Other
Wilson, Don	US Environmental Protection Agency	Interagency Taxonomic Information System—Data Development	243,300	Other

Subtotals: 5,902,884

National Museum of the American Indian									
Bernstein, Bruce	Andrew W. Mellon Foundation	Support for Conservation Training	953,000	Other					
Carlin, John	Akaloa Resource Foundation	NMAI Groundbreaking Programs	50,000	Other					
deMontano, Marty	New York State Council on the Arts	Native American Discovery Kits	15,000	Education					
Haworth, John	City of New York	Support for Public Programs at the G.G. Heye Center in NYC	25,000	Other					
Hoch, Charlotte	Akaloa Resource Foundation	Artist-in-Residence/Community Service Programs	50,000	Other					
Weatherford, Elizabeth	New York State Council on the Arts	Re-vising the Image	7,000	Other					
	National Science Resources Center		Subtotals: 1,100,000	6					
Lapp, Douglas	National Science Foundation	Science and Technology Concepts for Middle School —Year Three Funding	912,307	Research					
Lapp, Douglas	National Science Foundation	Leadership and Assistance for Science Education Reform (LASER)	1,196,987	Research					
			Subtotals: 2,109,294	2					
National Zoological Park									
Beck, Benjamin	Frankfort Zoological Society	Reintroduction of Golden Lion Tamarins	52,533	Research					
Brown, Janine	American Zoo and Aquarium Association	Improving Artificial Insemination Success in Tigers by Optimizing Hormonal Induction Therapy	6,750	Research					
Buff, Jennifer	Commonwealth of Virginia	Forest Biodiversity and Remote Sensing Workshop	14,101	Education					
Dittus, Wolfgang	Earthwatch Institute	Behavioral Ecology of Toque Macaques	79,200	Research					
Dittus, Wolfgang	Earthwatch Institute	Sri Lanka's Temple Monkeys	105,600	Research					
Frazier, Jack	National Wildlife Federation	Evaluation of Public Law 101-162, Section 9 as a Conservation Tool	25,000	Research					
Gibson, Margie	World Wildlife Fund	National Zoo Evening Lecture Series	1,130	Education					
Gibson, Margie	World Wildlife Fund	Evening Lecture Series at NZP	2,256	Education					
Greenberg, Russell	National Geographic Society	Conservation Value of Coffee Plantations for Breeding Tropical Birds	18,000	Research					
Hagedorn, Mary	National Institutes of Health	Preservation of Genetic Lines in a Non-Mammalian System—Year 4	87,120	Research					
Hagedorn, Mary	National Institutes of Health	Preservation of Genetic Lines in a Non-Mammalian System—Year 5	90,604	Research					
Hagedorn, Mary	US Dept of Commerce/Sea Grant College (Maryland)	Cryopreservation of Fish Embryos: Permeability of the Yolk Syncytial Layer	41,605	Research					
Marra, Peter	National Geographic Society	Consequences of Habitat Occupancy in Migrant Birds During Winter	13,800	Research					
McShea, William	Earthwatch Institute	Shenandoah Wildlife	13,500	Research					
McShea, William	National Geographic Society	Conservation and Ecology of an Eld's Deer Population in Central Myanmar	16,905	Research					
McShea, William	US Dept of Agriculture	Establishing Monitoring Protocol for Small Mammals on Allegheny Mountain	32,500	Research					

## Annual Report of Award Activities 1 October 1998–30 September 1999 (continued)

Principal Investigator	Sponsor	Project Title	Amount Awarded	Project Purpose
McShea, William	US Dept of Agriculture/Forest Service	Establishing Monitoring Protocol for Small Mammals on Allegheny Mountain	20,250	Research
Oftedal, Olav	Kent State University/NIH	Determinants of Reproductive Competence in Callitrichids	31,471	Research
Oftedal, Olav	US Dept of the Interior/Bureau of Land and Mines	Nutritional Studies on the Desert Tortoise and Plant Pep Analyses in the Eastern Mojave	200,000	Research
Penfold, Linda	Morris Animal Foundation	Understanding the Reproductive Biology of Gerenuk	20,296	Research
Petit, Lisa	US Dept of the Interior/US Geological Survey/BRD	Breeding Success of Bird Species Nesting in Forest Understory	15,000	Research
Petit, Lisa	US Dept of the Interior	Impacts of White-Tailed Deer on Forest Understory Birds in the Cuyahoga Valley National Recreational Areas	11,970	Research
Rappole, John	Defenders of Wildlife	Neotropical Migrants	15,000	Research
Robinson, Michael	Friends of the National Zoo	Calendar Year 1999 FONZ Grant Program	583,000	Research
Rudran, Rasanayagam	Project Nature Conservation and Buffer Zone Development/GTZ	Conservation Biology and Wildlife Management Training in Mongolia	21,848	Education
			Subtotals: 1,519,439	25
Office of Exhibits Central Bird, Mary	Bisbee Mining and Historical Museum (Affiliation)	Digging In	77,603	Exhibition
			Subtotals: 77,603	1
Office of the Provost Dallmeier, Francisco Dorn, Ellen	Mitsubishi Corporation Japanese American National Museum	Smithsonian Environmental Leadership Course From Bento to Mixed Plate: Americans of Japanese Ancestry in Multicultural Hawaii	20,000 125,000	Education Exhibition
Odo, Franklin	Rockefeller Foundation	A More Perfect Union: Japanese Americans and the US Constitution	10,000	Education
Rochin, Refugio	Rockefeller Foundation	Humanities Fellowships on Latino Cultural Research in a Museum Context—Year 3	81,495	Education
			Subtotals: 236,495	4
Office of the Secretary Muldoon, Claire	Getty Grant Program	The Conditions for Culture and Cultural Institutions at the End of the 20th Century: An Inquiry	20,000	Education
			Subtotals: 20,000	1

Smithsonian Archives	National Film Preservation Foundation	The Smithsonian South American Expedition of 1939	344	Other
Williams, Kathleen			Subtotals: 344	1
Smithsonian Environmental Research Center				
Coats, Donald	Chesapeake Research Consortium, Inc./NSF	Parasitism of Bloom-Forming Dinoflagellates: Host Species	68,273	Research
Correll, David	National Academy of Sciences	The Importance of Understanding Ecological Complexity to Predicting Effects of Multiple Stressors	197,326	Research
Correll, David	Academy of Natural Sciences	The Importance of Understanding Ecological Complexity to Predicting Effects of Multiple Stressors	96,942	Research
Drake, Bert	US Dept of Energy	Impact of Elevated CO <sub>2</sub> on a Florida Scrub-Oak Ecosystems	457,984	Research
Drake, Bert	US Dept of Energy	Rising CO <sub>2</sub> and Long-term Carbon and Nitrogen Storage in Terrestrial Ecosystems: An Empirical Carbon and Nitrogen Budget Validation	130,732	Research
Gallegos, Charles	US Environmental Protection Agency	CIS Net, Rhode River: Development of Optical Indicators	510,181	Research
Gallegos, Charles	St. Johns River Water Management District	Development of an Optical Water Quality Model for the Lower St. Johns River	36,568	Research
Hines, Anson	American Petroleum Institute	Ballast Water Exchange Experiment	34,512	Research
Hines, Anson	Regional Citizens' Advisory Council, Inc.	Study of Ballast-Mediated Introductions in the Prince William Sound	60,000	Research
Neale, Patrick	Chesapeake Research Consortium, Inc./NSF	UV Effects on Marine Production by Bacteria and Phytoplankton: Assessing the Impact of Ozone Depletion	62,291	Research
Neale, Patrick	Chesapeake Research Consortium, Inc./NSF	UV Effects on Marine Production by Bacteria and Phytoplankton: Assessing the Impact of UVB	58,189	Research
Ruiz, Gregory	US Dept of the Interior/Fish and Wildlife Service	Regional Research and Outreach: Experimental Analysis of Ballast Water Exchange	70,627	Research
Ruiz, Gregory	US Dept of Transportation	National Ballast Information Clearinghouse	300,000	Other
Ruiz, Gregory	US Dept of Transportation	National Ballast Information Clearinghouse	150,000	Other
Ruiz, Gregory	US Dept of Defense	Marine Invasive Species: Patterns of Invasion and Impacts on Biodiversity	266,000	Research
Ruiz, Gregory	State of Maryland/Department of Natural Resources	Analysis of Biofouling Organisms Associated with Powerplants: A Summary of Control Measures and the Importance Nonindigenous Species	61,051	Research
Ruiz, Gregory	State of Oregon/Univ. of Oregon	The Green Crab ( <i>Carcinus maenas</i> ) in the Pacific Northwest	12,000	Other

Annual Report of Award Activities 1 October 1998–30 September 1999 (continued)

Principal Investigator	Sponsor	Project Title	Amount Awarded	Project Purpose
Ruiz, Gregory	US Dept of Commerce/Natl Oceanic & Atmospheric Admin Park Foundation	Marine and Estuarine Exotic Species Database of the Northeastern U.S.	50,000	Research
Simons, Ross	NASA/Interagency Transfer	SERC Internship Summer Training Program	8,000	Other
Weller, Donald	US Environmental Protection Agency	Global Change Research Program	55,000	Research
Whigham, Dennis	US Environmental Protection Agency	Nanticoke Wetland Assessment Study	100,946	Research
Whigham, Dennis	US Environmental Protection Agency	Nanticoke Wetland Assessment Study	124,048	Research
		Subtotals: 2,910,670		22
Smithsonian Institution	Traveling Exhibit Service	Rural Initiatives Program	250,000	Exhibition
Sewell, Martha	John S. and James L. Knight Foundation	Voyage: A Scale Model Solar System	88,355	Exhibition
Sewell, Martha	US Dept of Energy	Under the Sun: An Outdoor Exhibition of Light	90,000	Exhibition
		Subtotals: 428,355		3
Smithsonian Office of Education	District of Columbia	Museum Magnet School	105,000	Education
Marable, Maria	US Dept of Education/IAT	Millennium Project—Smithsonian in Your Classroom	25,000	Education
Smith, Michelle			Subtotals: 130,000	2
Smithsonian Tropical Research Institute	National Science Foundation	Ship Operations 1999—URRACA	66,245	Research
Barnes, Howard	National Science Foundation	Ship Operations—Training	9,156	Other
Barnes, Howard	State of California/NSF	Molecular Analysis of Morphologically Defined Taxa in the Monastrea Annularis Complex	57,368	Research
Coates, Anthony	National Institutes of Health	Ecologically Guided Bioprospecting in Panama	490,447	Research
Coley, Phyllis	National Institutes of Health	Ecologically Guided Bioprospecting in Panama	557,800	Research
Coley, Phyllis	National Institutes of Health	Ecologically Guided Bioprospecting in Panama	33,600	Research
Coley, Phyllis	US Agency for International Development	Panama Canal Watershed Natural Resources Monitoring Project	209,987	Research
Condit, Richard	Harvard University	Techniques for Analyzing Forest Structures with Remote Sensing in Panama	20,000	Research

Condit, Richard	US Agency for International Development	Panama Canal Watershed Monitoring Program	180,000	Research
Condit, Richard	US Agency for International Development	Panama Canal Watershed Natural Resources Monitoring Project (PMMC)	199,437	Research
Condit, Richard	US DoD/Department of the Army	Ground-truth Work Relating to Hydice Fly-over	59,850	Research
Herre, Allen	American Cocoa Research Institute	Studies of Symbiotic and Pathogenetic Fungi Associated with Cacao	46,212	Research
Herre, Allen	American Cocoa Research Institute	Studies of Symbiotic and Pathogenetic Fungi Associated with Cacao, Year 2	66,912	Research
Losos, Elizabeth	World Wildlife Fund, Inc./USAID	Long-term Monitoring of Forest Dynamics, Management, and Use of a Cameroonian Lowland Moist Forest	84,593	Research
Losos, Elizabeth	Center for International Forestry Research	Forest Diversity and Dynamism Meeting	5,000	Other
Losos, Elizabeth	Nature Conservancy	J1 Feasibility Study	10,000	Research
Losos, Elizabeth	US Dept of Defense	Drug Development and Conservation of Biodiversity in West and Central Africa	5,500	Equipment
Losos, Elizabeth	US DoD/Department of the Army	Biodiversity Conservation and Training in Western Africa	100,952	Education
Rubinoff, Ira	Tinker Foundation, Inc	Ecotourism for the New Millennium	100,000	Research
Rubinoff, Ira	Turner Foundation	STRI General Support	30,000	Research
Rubinoff, Ira	Mellon Foundation	Joint Program in Tropical Biology	225,000	Education
Rubinoff, Ira	Andrew W. Mellon Foundation	Research in Tropical Plant Biology	950,000	Research
Santos-Granero, Fernando	Wenner-Gren Foundation	Comparative Arawakan Histories: Rethinking Language, Family, and Culture Area in Amazonia	15,000	Other
Wright, S. Joseph	University of California	Integration of Canopy and Hydraulic Architecture in Psychotria Species	12,600	Research
Wright, S. Joseph	University of California	Integration of Canopy and Hydraulic Architecture in Neotropical Shrubs Along Light and Moisture Gradients	12,500	Research
Wright, S. Joseph	University of California	Integration of Canopy and Hydraulic Architecture in Psychotria Species	10,000	Research
Subtotals:			3,558,159	26
Totals:			\$40,472,379	211

## Publications of the Smithsonian Institution Press

During fiscal year 1999, the Smithsonian Institution Press released more than 50 publications, including trade books, exhibition catalogs, and monographs. The most important are listed below.

Billman, Brian R., and Gary M. Feinman, eds. *Settlement Pattern Studies in the Americas: Fifty Years since Virú*.

Bouët, Thierry. *Hotel People*.

Bowman, Constance, and Clara Marie Allen. *Slacks and Calluses: Our Summer in a Bomber Factory*. (pbk.)

Carr, Carolyn Kinder. *Hans Namuth: Portraits*.

Clarke, Alison J. *Tupperware: The Promise of Plastic in 1950s America*.

Crouch, Tom D. *Aiming for the Stars: The Dreamers and Doers of the Space Age*.

Day, Dwayne A., John M. Logsdon, and Brian Latell. *Eye in the Sky: The Story of the CORONA Spy Satellites*. (pbk.)

Dobres, Marcia-Anne, and Christopher R. Hoffman. *The Social Dynamics of Technology: Practice, Politics, and World Views*.

Engen, Donald D. *Wings and Warriors: My Life as a Naval Aviator*. (pbk.)

Ernst, Carl H. *Venomous Reptiles of North America*. (pbk.)

Glines, Carroll V. *Bernt Balchen: Polar Aviator*.

Glines, Carroll V. *Roscoe Turner: Aviation's Master Showman*. (pbk.)

Gmelch, George, and J. J. Weiner. *In the Ballpark: The Working Lives of Baseball People*. (pbk.)

Haviland, John B., with Roger Hart. *Old Man Fog and the Last Aborigines of Barrow Point*.

Henderson, Amy, and Adrienne L. Kaeppler, eds. *Exhibiting Dilemmas: Issues of Representation at the Smithsonian*. (pbk.)

Hunt, Marjorie. *The Stone Carvers: Master Craftsmen of Washington National Cathedral*.

Holo, Selma Reuben. *Beyond the Prado: Museums and Identity in Democratic Spain*.

Isler, Morton L., and Phyllis R. Isler. *The Tanagers: Natural History, Distribution, and Identification*. (pbk.)

Johnsgard, Paul A. *The Pheasants of the World: Biology and Natural History*. second edition.

Kirkland, Richard C. *Tales of a War Pilot*.

Kozak, David L., and David I. Lopez. *Devil Sickness and Devil Songs: Tohono O'odham Poetics*.

Krech, Shepard, III, and Barbara A. Hail, eds. *Collecting Native America, 1870-1960*.

Lambeth, Benjamin S. *Russia's Air Power in Crisis*.

McCurdy, Howard E. *Space and the American Imagination*. (pbk.)

Mergen, Bernard. *Snow in America*. (pbk.)

Milanich, Jerald T. *Laboring in the Fields of the Lord: Spanish Missions and Southeastern Indians*.

Minkinen, Arno Rafael. *Body Land*.

Mulvaney, John, and Johan Kamminga. *Prehistory of Australia*.

Nourse, Jennifer W. *Conceiving Spirits: Birth Rituals and Contested Identities among Laujé of Indonesia*.

Reynolds, John E., III, and Sentiel A. Rommel, eds. *Biology of Marine Mammals*.

Ronis, Willy, and Noël Simsolo. *Sundays by the River*.

Scherman, Tony. *Backbeat: Earl Palmer's Story*.

Sexton, James D., and Ignacio Bizarro Ujpan. *Heart of Heaven. Heart of Earth. and Other Mayan Folktales*.

Shepherdson, David J., Jill D. Mellen, and Michael Hutchins, eds. *Second Nature: Environmental Enrichment for Captive Animals*. (pbk.)

Sieff, Jeanloup. *Dance*.

Thompson, Milton O., and Curtis Peebles. *Flying without Wings: NASA Lifting Bodies and the Birth of the Space Shuttle*.



- Twiss, John R., and Randall R. Reeves. *Conservation and Management of Marine Mammals*.
- West, Patricia. *Domesticating History: The Political Origins of America's House Museums*.
- Wilson, Don E., and Sue Ruff, eds. *The Smithsonian Book of North American Mammals*.
- Wooldridge, E. T. *Carrier Warfare in the Pacific: An Oral History Collection*. (pbk.)

#### Federal Series Publications

#### Smithsonian Contributions to Anthropology

42. Douglas H. Ubelaker and Catherine E. Ripley. "The Ossuary of San Francisco Church, Quito, Ecuador: Human Skeletal Biology." 32 pages, 10 figures, 19 tables. 20 July 1999.

#### Smithsonian Contributions to Botany

88. Lisa Kealhofer and Dolores R. Piperno. "Opal Phytoliths in Southeast Asian Flora." 39 pages, 49 figures, 5 tables. 10 November 1998.
90. A. de Lange and F. Bouman. "Seed Micromorphology of Neotropical Begonias." 49 pages 1 figure, 21 plates. 10 September 1999.

#### Smithsonian Contributions to Paleobiology

85. Richard K. Olsson, Christoph Hemleben, William A. Berggren, and Brian T. Huber, editors. "Atlas of Paleocene Planktonic Foraminifera." 252 pages, 37 figures, 71 plates. 3 March 1999.

#### Smithsonian Contributions to Zoology

601. James C. Tyler and Diane M. Tyler. "Natural History of the Sea Fan Blenny, *Emblemariopsis pricei* (Teleostei: Chaenopsidae), in the Western Caribbean." 24 pages, color frontispiece, 7 figures, 6 tables. 10 August 1999.
602. Louis S. Kornicker and Elizabeth Harrison-Nelson. "Eumeli Expeditions, Part 1: *Tetragonodon rex*. New Species, and General Reproductive Biology of the Myodocopina." 55 pages, 25 figures, 11 tables. 4 January 1999.
603. Karl V. Krombein, Beth B. Norden, Melinda M. Rickson, and Fred R. Rickson. "Biodiversity of Domatia Occupants (Ants, Wasps, Bees, and Others) of the Sri Lankan Myrmecophyte *Humboldtia laurifolia* Vahl (Fabaceae)." 34 pages, 70 figures, 1 table. 29 July 1999.
604. Lynne R. Parenti, Jeffrey M. Clayton, and Jeffrey C. Howe. "Catalog of Type Specimens of Recent Fishes in the National Museum of Natural History, Smithsonian Institution, 9: Family Poeciliidae (Teleostei: Cyprinodontiformes)." 22 pages. 10 September 1999.

## Publications of the Staff

### Office of the Provost

Kotler, Neil and Philip Kotler, *Museum Strategy and Marketing: Designing Missions, Building Audiences, Generating Revenue and Resources* (1998).

### Archives of American Art

#### Office of the Director

Kirwin, Liza. Ph.D. dissertation. *It's All True: Imagining New York's East Village Art Scene of the 1980s*. University of Maryland at College Park, 1999.

Stover, Catherine and Lisa Lynch. *A Finding Aid to the Rockwell Kent Papers*. (1998).

Tell, Darcy, ed. *Archives of American Art Journal*. quarterly magazine, published continuously since 1960.

Wattenmaker, Richard J. Lecture. "Dr. Albert C. Barnes and The Barnes Foundation," Cranbrook Art Museum, December 1999.

#### West Coast Regional Center

Karlstrom, Paul J. Panelist. "Visions of Empire in West Coast Public Art," American Studies Association Conference, Seattle, WA, November 1998.

———. Catalogue essay. "Fire and Flux, an Undaunted Vision: The Art of Charles Strong," Wiegand Gallery, Belmont, CA, November 1998.

———. Catalogue essay. "Rivera, Mexico and Modernism in California Art," *Diego Rivera, Art & Revolution*. for traveling exhibition organized by the Instituto Nacional de Bellas Artes, Mexico City, Mexico; venues: Cleveland, Los Angeles County Museum of Art, Houston. 1999.

———. Catalogue essay. "Jerome at the Smithsonian," *Jerome Caja—Paintings from the Smithsonian Institution, Archives of American Art*. Visual Arts Center, California State University, Fullerton, CA, February 1999.

———. Lecture. "Robert Arneson, Race and Counterculture," Lebanon Valley College, Annville, PA, March 1999.

———. Session speaker and moderator. "The Automobile from Artifact to Art," Cross Cultural Studies, International Popular Culture Conference, Cambridge University, Sidney Sussex College, Cambridge, England, August 1999.

———. Lecture. "California Art from the Gold Rush to 1900," Friends of the South Pasadena Public Library, South Pasadena, CA, September 1999.

———. Moderator and Speaker. "Chang Dai-Chien in California," San Francisco State University symposium (in conjunction with exhibition), co-sponsored by the National Museum of History, Republic of China, San Francisco, CA, September 1999.

### Freer Gallery of Art and Arthur M. Sackler Gallery

#### Office of the Director

Dehejia, Vidya, et al. *Love in Asian Art and Culture*. Washington, D.C. and Seattle: Arthur M. Sackler Gallery, Smithsonian Institution, in association with the University of Washington Press, 1998.

Dehejia, Vidya, et al. *Devi, the Great Goddess: Female Divinity in South Asian Art*. Washington, D.C., Ahmedabad, and Munich: Arthur M. Sackler Gallery, Smithsonian

Institution, in association with Mapin Publishing, and Prestel Verlag, 1999.

Thackston, Wheeler, trans. and ed. *The Jahangirnama: Memoirs of Jahangir, Emperor of India*. Washington, D.C., and New York: Freer Gallery of Art and Arthur M. Sackler Gallery in association with Oxford University Press, 1999.

### Research and Collections Division

Chang, Joseph. "Mr. Wang Fangyu and His Collection of Bada Shanren's Painting and Calligraphy," *CANS Chinese Art News*, no. 13 (1998): 105.

———. "Landscape Painting of Dong Qichang." *New History of World Art, Asian*, vol. 8: 131–40. Tokyo: Shogakukan, 1999.

Cort, Louise Allison. "Aspects of Medieval Shigaraki Ceramics." *Ko-Shigaraki—Jars from Shigaraki's Medieval Kilns*, 261–66 (English) and 156–62 (Japanese). Shigaraki, Japan: Miho Museum, 1999.

———. "Assembly of Tea Objects (*toriawase*)" and Hon'ami Koetsu (1558–1637) Calligraphy (letter); Raku Sonyu (1664–1716), Raku Ware Tea Bowl named 'Surusumi'; Raku Sonyu (1664–1716), Raku Ware Tea Bowl named 'Ikezuki'." *Crosscurrents: Masterpieces of East Asian Art from New York Private Collections*, 120–29. Ed. Amy G. Poster. New York: Japan Society, 1998.

Cort, Louise Allison, and H. Leedom Lefferts, Jr. "Women at the Center of an Industrializing Craft: Earthenware Pottery Production in Northeast Thailand." *Museum Anthropology* 23, no. 1 (1999): 21–32.

Dehejia, Vidya. *Devi the Great Goddess: Female Divinity in South Asian Art*. Ahmedabad in Washington, D.C. and Munich: Arthur M. Sackler Gallery, Smithsonian Institution, in association with Mapin Publishing and Prestel Verlag, 1999.

———. "The Very Idea of a Portrait." *A Orientalis* 28 (1998): 41–48.

Douglas, Janet G., and Jenny F. So. "Understanding and Identifying Jades from the Hongshan Culture." *East Asian Jade: Symbol of Excellence*, vol. 1, edited by Tang Chung, 148–163. Hong Kong: Chinese University of Hong Kong, 1998.

Gunter, Ann C. "A Zoomorphic Vessel Stand in the Arthur M. Sackler Gallery." *Essays on Ancient Anatolia in the Second Millennium B.C.*, edited by H.I.H. Prince Takahito Mikasa, 153–58. Wiesbaden: Harrassowitz Verlag, 1999.

Kecskes, Lily. *An Annotated List of Works in Western Languages on Chinese Art and Architecture*. Vancouver: Art Libraries Society of North America, March 1999.

———. "Tsien, Tsuen-hsuei. *Zhong Mei shuyuan*. Taipei: Wenhua tushuguan guanli zixun youxian gongsi, 1998 (book review). *Journal of East Asian Libraries* 118 (June 1999): 56–57.

Norman, Jane. *East Asian Lacquer in New York State Historic Sites: A Discussion with Jane Norman*. Transcript of an interview conducted by David Bayne. Waterford, New York: New York State Office of Parks, Recreation and Historic Preservation, Bureau of Historic Sites, 1999.

So, Jenny F. "Die Han-Zeit im Spiegel der königlichen Schätze." *Schätze für König Zhao Mo: Das Grab von Nan Yue*, 70–79. Heidelberg: Braus Verlag, 1998.

———. "The S-shaped Belt Plaques of Qin (in English and Chinese)." *Adornment for Body and Soul: Ancient Chinese Ornaments from the Mengdiexuan Collection*, 87–97. Hong Kong: University Museum and Art Gallery, 1999.

———. "A Late-Shang Bronze Ax Blade in the Freer Gallery of Art." *Papers of the International Symposium on the Shang Culture in Ancient China*, 375–79. Beijing: The Encyclopedia of China Publishing House, 1998.

Stuart, Jan. "Ah Leon's Bridge: Illusion in Clay." *Beyond Yixing: Ceramic Art of Ah Leon*, 28–68 and 121–27. Taipei: Purple Sands Publishing, 1998.

———. "Two Birds with the Wings of One: Revealing Romance in Chinese Art." *Love in Asian Art and Culture*. Washington, D.C., and Seattle: Arthur M. Sackler Gallery, Smithsonian Institution, in association with the University of Washington Press, 1998.

———. "Imperial Pastimes: Dilettantism as Statecraft in the Qing Dynasty." *Life in the Imperial Court of Qing Dynasty China. Proceedings of the Denver Museum of Natural History* 3, no. 15. Denver: Denver Museum of Natural History, 1998. 55–65.

### Center for Folklife and Cultural Heritage

Belanus, Betty and Lynn Martin. "Celebrating New Hampshire's Stories." In *Smithsonian Folklife Festival Program Book*, edited by Carla M. Borden and Peter Seitel, 13–16. Washington, D.C.: Smithsonian Institution.

———. "Braggin' Rights': Celebrating New Hampshire Stories." *Smithsonian Talk Story* (15)(Spring 1999):1. Washington, D.C.: Smithsonian Institution.

———, Arlene Reiniger, and Lynn Martin Graton. "New Hampshire at the Festival: Some Favorite Moments." *Smithsonian Talk Story* (16)(Fall 1999):3. Washington, D.C.: Smithsonian Institution.

Beldiman, Laura. "Rediscovering Romania." *Smithsonian Talk Story* (16)(Fall 1999):4. Washington, D.C.: Smithsonian Institution.

Borden, Carla and Peter Seitel, editors. *Smithsonian Folklife Festival Program Book*. Washington, D.C.: Smithsonian Institution.

———, editor. *Smithsonian Talk Story* (15)(Spring 1999). Washington, D.C.: Smithsonian Institution.

———, editor. *Smithsonian Talk Story* (16)(Fall 1999). Washington, D.C.: Smithsonian Institution.

Cadaval, Olivia. *Creating a Latino Identity in the Nation's Capital: The Latino Festival*. New York: Garland Publishing, Inc.

———. "Cross Programs at the 1999 Festival." *Smithsonian Talk Story* (16)(Fall 1999):6. Washington, D.C.: Smithsonian Institution.

Doran, Kevin. "Smithsonian Folkways: Licensing and International Sales." *Smithsonian Talk Story* (15)(Spring 1999):14. Washington, D.C.: Smithsonian Institution.

- Dunlap, Brenda. "Smithsonian Folkways: New Releases." *Smithsonian Talk Story* (15)(Spring 1999):12. Washington, D.C.: Smithsonian Institution.
- Early, James. "Values We Bring to Our Work." In *Smithsonian Folklife Festival Program Book*, edited by Carla M. Borden and Peter Seitel, 4–5. Washington, D.C.: Smithsonian Institution.
- . "South Africa at the Festival: The Historical Context." In *Smithsonian Folklife Festival Program Book*, edited by Carla M. Borden and Peter Seitel, 58–60. Washington, D.C.: Smithsonian Institution.
- . "South Africa: Crafting the Economic Renaissance of the Rainbow Nation." *Smithsonian Talk Story* (15)(Spring 1999):4. Washington, D.C.: Smithsonian Institution.
- . "Paving the Road to Diversity." *Smithsonian Talk Story* (15)(Spring 1999):8. Washington, D.C.: Smithsonian Institution.
- . "South Africa Festival Program: Success on Many Fronts." *Smithsonian Talk Story* (16)(Fall 1999):5. Washington, D.C.: Smithsonian Institution.
- . "Cultural Heritage Policy." *Smithsonian Talk Story* (16)(Fall 1999):17. Washington, D.C.: Smithsonian Institution.
- Groce, Nancy. *New York: Songs of the City*. New York: Watson-Guptill Publishing.
- Horowitz, Amy. "Center and UNESCO to Co-host Conference." *Smithsonian Talk Story* (15)(Spring 1999):7. Washington, D.C.: Smithsonian Institution.
- . "Smithsonian-UNESCO Conference on Folklore and Traditional Culture Yields Policy Directions." *Smithsonian Talk Story* (16)(Fall 1999):1. Washington, D.C.: Smithsonian Institution.
- . "Jerusalem Project." *Smithsonian Talk Story* (16)(Fall 1999):11. Washington, D.C.: Smithsonian Institution.
- Hunt, Marjorie. *The Stone Carvers: Master Craftsmen of Washington National Cathedral*. Washington, D.C.: Smithsonian Institution Press.
- and Diana Baird N'Diaye. "Summer Teacher Seminars." *Smithsonian Talk Story* (16)(Fall 1999):8. Washington, D.C.: Smithsonian Institution.
- Insuaste, Gisela. "The Latino Community Heritage Center: *Nuestras Voces en Washington, D.C.*" *Smithsonian Talk Story* (15)(Spring 1999):16. Washington, D.C.: Smithsonian Institution.
- Kennedy, Richard. "Silk Road Program Proposed for 2002." *Smithsonian Talk Story* (16)(Fall 1999):9. Washington, D.C.: Smithsonian Institution.
- Kurin, Richard. "Time Has Come Today." In *Journal of Folklore Research* 36(2/3)(May-December 1999): 299–302.
- . "Doctor, Lawyer, Indian Chief" (reprint). *Anthropology* 98/99. Guilford, CT: Dushkin/McGraw-Hill.
- . "Cultural Heritage Development." In *Smithsonian Folklife Festival Program Book*, edited by Carla M. Borden and Peter Seitel, 4–11. Washington, D.C.: Smithsonian Institution.
- . "Director's Talk Story." *Smithsonian Talk Story* (15)(Spring 1999):2. Washington, D.C.: Smithsonian Institution.
- . "Romania at the 1999 Festival." *Smithsonian Talk Story* (15)(Spring 1999):5. Washington, D.C.: Smithsonian Institution.
- . "Director's Talk Story." *Smithsonian Talk Story* (16)(Fall 1999):2. Washington, D.C.: Smithsonian Institution.
- Maloney, Michael. "Smithsonian Folkways: Manufacturing and Distribution." *Smithsonian Talk Story* (15)(Spring 1999):14. Washington, D.C.: Smithsonian Institution.
- . "Smithsonian Folkways: World Wide Web Development." *Smithsonian Talk Story* (15)(Spring 1999):14. Washington, D.C.: Smithsonian Institution.
- N'Diaye, Diana Baird. "Teacher Seminar." *Smithsonian Talk Story* (15)(Spring 1999):5. Washington, D.C.: Smithsonian Institution.
- . "Maroon Exhibition Opening." *Smithsonian Talk Story* (15)(Spring 1999):17. Washington, D.C.: Smithsonian Institution.
- . "Update: 'Creativity and Resistance' Maroon Traveling Exhibition." *Smithsonian Talk Story* (16)(Fall 1999):10. Washington, D.C.: Smithsonian Institution.
- . "African Immigrant Folklife Project Update." *Smithsonian Talk Story* (16)(Fall 1999):11. Washington, D.C.: Smithsonian Institution.
- Parker, Diana. "Conserving and Creating Cultural Heritage: The Smithsonian Folklife Festival." In *Smithsonian Folklife Festival Program Book*, edited by Carla M. Borden and Peter Seitel, 8–9. Washington, D.C.: Smithsonian Institution.
- Place, Jeff. "The Recordings of Woody Guthrie." *Hard Travelin': The Life and Legacy of Woody Guthrie*, edited by Robert Santelli and Emily Davidson. Connecticut: Wesleyan University Press.
- . Liner notes. *Woody Guthrie: The Asch Recordings*. SFW 40112.
- . Liner notes. *Lead Belly Sings for Children*. SFW 45047.
- Rinzler, Kate. "Fifth Annual Ralph Rinzler Memorial Concert." *Smithsonian Talk Story* (15)(Spring 1999):6. Washington, D.C.: Smithsonian Institution.
- Seeger, Anthony. "Musical Genres and Contexts" [overview essay]. In *The Garland Encyclopedia of World Music Volume 2: South America, Mexico, Central America and the Caribbean*, edited by Dale A. Olsen and Daniel E. Sheehy, 43–53. New York: Garland Publishing Company.
- . "Social Structure, Musicians, and Behavior" [overview essay]. In *The Garland Encyclopedia of World Music Volume 2: South America, Mexico, Central America and the Caribbean*, edited by Dale A. Olsen and Daniel E. Sheehy, 54–65. New York: Garland Publishing Company.
- . "Musical Dynamics" [overview essay]. In *The Garland Encyclopedia of World Music Volume 2: South America, Mexico, Central America and the Caribbean*, edited by Dale A. Olsen and Daniel E. Sheehy, 66–78. New York: Garland Publishing Company.

———. "The Tropical Forest Region" [regional overview essay]. In *The Garland Encyclopedia of World Music Volume 2: South America, Mexico, Central America and the Caribbean*, edited by Dale A. Olsen and Daniel E. Sheehy, 123–136. New York: Garland Publishing Company.

———. "Suyá" [brief community essay]. In *The Garland Encyclopedia of World Music Volume 2: South America, Mexico, Central America and the Caribbean*, edited by Dale A. Olsen and Daniel E. Sheehy, 143–149. New York: Garland Publishing Company.

——— and Anya Peterson Royce. "Music, Dance and Drama: An Anthropological Perspective." In *Latin America, Perspectives on a Region*, 2<sup>nd</sup> edition, edited by Jack Hopkins, 226–240. New York: Holmes and Meier.

———. "Sounds of the Struggle: Folkways Records and the Civil Rights Movement." In *Freedom is a Constant Struggle: An Anthology of the Mississippi Civil Rights Movement*, by Susie Erenrich, 506–509. Montgomery, Alabama: Black Belt Press.

———. "World Performing Arts and Multi-Media." In *The Future of World Performing Arts and Multimedia*, 7–19, proceedings of a conference in Osaka, December 1998. Osaka, Japan: Information Society Development Association.

———. "Happy Birthday, ATM! Ethnographic Futures of the Archives of the 21<sup>st</sup> Century." In *A Quarterly of the Archives of Traditional Music* (January 1999):1–3.

———. "Creating Cultural Heritage through Recordings." In *Smithsonian Folklife Festival Program Book*, edited by Carla M. Borden and Peter Seitel, 6–7. Washington, D.C.: Smithsonian Institution.

——— and D.A. Sonneborn. "Cultural Policy and Smithsonian Folkways Recordings." *Smithsonian Talk Story* (16)(Fall 1999):17. Washington, D.C.: Smithsonian Institution.

———. "Intellectual Property and Recorded Sound: Gold mine and Minefield." In *Exploiting Images and Image Collections in the New Media, Gold Mine or Legal Mine Field?*, edited by Barbara Hoffman. London: Kluwer Law International, Ltd.

Seitel, Peter. *The Powers of Genre: Interpreting Haya Oral Literature*. New York: Oxford University Press.

———. "PEOPLink." *Smithsonian Talk Story* (15)(Spring 1999):15. Washington, D.C.: Smithsonian Institution.

Shrager, Sam. *The Trial Lawyer's Art*. Philadelphia: Temple University Press.

Simpkins, Ronnie. "Smithsonian Folkways: Special-Order CDs." *Smithsonian Talk Story* (15)(Spring 1999):14. Washington, D.C.: Smithsonian Institution.

Sonneborn, D.A. "Street Violinist in Bologna (1988)" [b&w full-page photo and caption]. In *Garland Encyclopedia of Music: Europe* (Vol. 8):32–33.

———. "Smithsonian Folkways: What We're Up To." *Smithsonian Talk Story* (15)(Spring 1999):12. Washington, D.C.: Smithsonian Institution.

Vennum, Tom. "Recycling Festival Props." *Smithsonian Talk Story* (16)(Fall 1999):18. Washington, D.C.: Smithsonian Institution.

Walle, Alf H. *Cultural Tourism*. Boulder, Colorado: Westview Press.

## Sound Recordings

*Blues Routes: Blues and Jazz, Heroes and Tricksters, Worksongs and Street Music*. SFW 40118.

Oscar Brand. *Presidential Campaign Songs, 1789–1996*. SFW 45051.

*Choose Your Partners! Contra Dance and Square Dance Music of New Hampshire*. SFW 40126.

Woody Guthrie. *The Asch Recordings*. SFW 40112.

Woody Guthrie. *Buffalo Skinners: The Asch Recordings, Volume 4*. SFW 40103.

Ella Jenkins. *Call and Response: Rhythmic Group Singing*. SFW 45030.

*Ella Jenkins and the Goodwill Spiritual Choir of Chicago: American Folk Songs and Rhythms*. SFW 45003.

*Ella Jenkins and a Union of Friends Pulling Together*. SFW 45046.

Coco Kallis. *Environmental Songs for Kids*. SFW 45048.

*Lead Belly Sings for Children*. SFW 45047.

Mademoiselle, Voulez-vous Danser? *Franco-American Music from the New England Borderlands*. SFW 40116.

*The Mississippi: River of Song*. SFW 40086.

*Music of Indonesia 16: Music from the Southeast Sumbawa, Sumba, Timor*. SFW 40443.

*Music of Indonesia 17: Kalimantan: Dayak Ritual and Festival Music*. SFW 40444.

*Northumberland Rant: Traditional Music from the Edge of England*. SFW 40473.

*Praise the Lord! Gospel Music in Washington, D.C.* SFW 40113.

*Saints' Paradise: Trombone Shout Bands from the United House of Prayer*. SFW 40117.

Pete Seeger. *Headlines & Footnotes*. SFW 40111.

*Taquachito Nights: Conjunto Music from South Texas*. SFW 40477.

*Tuva, Among the Spirits: Sound, Music, and Nature in Sakha and Tuva*. SFW 40452.

## Film and Video

*Earl's Canoe: A Traditional Ojibwe Craft*, produced by Thomas Vennum, Jr., with Charles Weber and participation of Earl Nyholm. Color, 27 min.

*Hosay Trinidad*, by John Bishop with Frank Korom and Guha Shankar. 45-minute video.

## Cooper-Hewitt, National Design Museum

Albrecht, Donald with Bruce Hannah. "Unlimited by Design," *Cooper-Hewitt*, November 1998.

- Albrecht, Donald. "Artists Fascinated by Architecture." *Architectural Record*, December 1998.
- . "Stay Cool! Air-conditioning America." *National Building Museum*, May 1999.
- . "Art on Stage." *Guggenheim Museum* magazine. Fall 1999.
- Commoner, Lucy. "Static Electricity in Conservation." *ICOM Ethnographic Conservation Newsletter* No. 18, October 1998.
- . "Conservation of the 'Lion Strangler.'" *Magazine*. Cooper-Hewitt, National Design Museum, Summer 1999.
- Dunn, Dorothy. "Old Collections New Audiences: Decorative Arts and Visitor Experience for the 21<sup>st</sup> Century." *Henry Ford Museum and Greenfield Village*. Fall 1999.
- Ibelli, Juliette V. "Off-site Storage Facility Selection: Common Sense Considerations." *Registrars' Quarterly*, Registrars Committee Western Region-American Association of Museums, Summer 1999.
- Shinn, Deborah. "The Huguenot Legacy: English Silver, 1680–1760," *Magazine*. Cooper-Hewitt, National Design Museum, Winter 1999.
- Sonday, Milton. "Damask: Definition and Technique." *Riggisberger Berichte* 7. Riggisberg: Abegg-Stiftung, 1999.
- Symmes, Marilyn. "Fountains: Designing for the Rise and Fall of Water." *Drawing*, Fall 1998.
- Yelavich, Susan. "Narrative: A Security Blanket for the Nervous 90s." *American Center for Design Journal*. 1999.
- . "Beauty is Back or Design Gets a Hickey." *American Center for Design Journal*. Fall 1999.

## Hirshhorn Museum and Sculpture Garden

### Department of Public Programs

- Benezra, Neal. *Directions—Julió Sarmiento: Fundamental Accuracy*. Washington, D.C.: Hirshhorn Museum and Sculpture Garden, 1999. Exhibition brochure.
- . "Of Pissoids and Public Seating: *Etude de Couleur* and Franz West's Public Art." In Robert Fleck, et al., *Franz West*, 82–93. London: Phaidon, 1999.
- . "Mind over Matter [Bruce Nauman]." *Artnews* 98, no. 5 (May 1999): 143.
- Bush, Teresia. "James Weeks." In *To Conserve a Legacy: American Art from Historically Black Colleges and Universities*. 231–33. Cambridge: MIT Press, 1999.
- Lawrence, Sidney. *Ghirardelli: Portrait of a Family, 1849–1999*. San Francisco: Museo Italo Americano, 1999. Exhibition brochure.
- Rosenzweig, Phyllis. *Chuck Close*. Washington, D.C.: Hirshhorn Museum and Sculpture Garden, 1998. Exhibition brochure.
- Viso, Olga M. *Directions—Sam Taylor-Wood*. Washington, D.C.: Hirshhorn Museum and Sculpture Garden, 1999. Exhibition brochure.

- Zilczer, Judith. "Un architecte de la sculpture moderne." In Marie Pessiot and Bénédicte Ajac, et al. *Duchamp-Villon: Collections du Centre Georges Pompidou, Musée National d'Art Moderne et du Musée des Beaux-Arts de Rouen*, 12–21. Paris: Centre Georges Pompidou and Réunion des Musées Nationaux; Rouen: Musée des Beaux-Arts de Rouen, 1998.
- . "Arthur B. Davies." In John A. Garraty and Mark C. Carnes, eds., *American National Biography*, vol. 6, 152–53. New York: Oxford University Press, 1999.
- . *Brice Marden, Work of the 1990s: Paintings, Drawings, and Prints*. Washington, D.C.: Hirshhorn Museum and Sculpture Garden, 1999. Exhibition brochure.
- . "John Flannagan." In John A. Garraty and Mark C. Carnes, eds., *American National Biography*, vol. 8, 88–90. New York: Oxford University Press, 1999.
- . "Joseph H. Hirshhorn." In John A. Garraty and Mark C. Carnes, eds., *American National Biography*, vol. 13, 693–94. New York: Oxford University Press, 1999.
- . "Raymond Duchamp-Villon and the American Avant-Garde." *Archives of American Art Journal* 38, nos. 1 and 2 (1998): 14–27.
- . "Research Approaches in Art History." *Grapevine* no. 33 (February 1999): 1–2.
- . "Richard Lindner." In John A. Garraty and Mark C. Carnes, eds., *American National Biography*, vol. 10, 860–62. New York: Oxford University Press, 1999.

### Conservation

- Bedford, Clarke. "Little Dancer." *Muse* (March 1999).
- Lake, Susan, Suzanne Q. Lomax and Michael R. Shilling. "A Technical Investigation of Willem de Kooning's Paintings from the 1960s and 1970s." *Preprints for the 12<sup>th</sup> Triennial ICOM Meeting, Volume 1*. ICOM Committee for Conservation, 1999.

## National Air and Space Museum

### Aeronautics Division

- Cochrane, Dorothy. "Amelia Earhart," *American National Biography*. John A. Garraty and Mark C. Carnes, eds. (New York, Oxford University Press, 1999): 221–223.
- . "Mary Feik, A Master Mechanic with a Passion," *Aviation for Women* (March/April 1999): 33–35.
- . "Phoebe Omlie," *American National Biography*. John A. Garraty and Mark C. Carnes, eds. (New York, Oxford University Press, 1999): 717–718.
- Crouch, Tom. *Aiming for the Stars: Dreamers and Doers of the Space Age*. Washington, D.C.: The Smithsonian Institution Press, 1999.
- . "An Airplane for Everyman: The Department of Commerce and the Light Airplane Industry," *Innovation and the Development of Flight*, Roger Launius, ed., (College Station, Texas: Texas A&M University Press, 1999): 166–187.

- . "First Flight? Says Who?," *National Aerospace Conference Proceedings* (Dayton, Ohio: Wright State University, 1999): 114–121.
- . "Introduction," *National Aerospace Conference Proceedings* (Dayton, Ohio: Wright State University, 1999): iv–vi.
- . "Kill Devil Hills, 17 December 1903," *Technology and Culture*, (July 1999): 595–598.
- . "The Future of Flight," *The NOVA Reader: Science at the Turn of the Millennium*, Sandra Hackman, ed., (New York: TV Books, 1999): 188–189.
- Lee, Russell. Article on Alexander De Seversky published in *The Oxford Companion of American Military History*, (Oxford University Press, 1999): 650.
- Pisano, Dominick. "Edwin A. Link, Jr.," *American National Biography*, John A. Garraty and Mark C. Carnes, eds., Cary (North Carolina: Oxford Univ. Press, 1999): 707–708.
- . Book review, *Molly Merryman, Clipped Wings: The Rise and Fall of the Women Airforce Service Pilots (WASPs) of World War II*, (New York: New York University Press, 1998), *The American Historical Review*, (April 1999): 597–98.
- . "Flying High in Hollywood: Howard Hawks and the Representation of Pilots in the Aviation Film Genre," *Proceedings of the National Aerospace Conference* (Dayton, Ohio: Wright State University, 1999): 32–40.

### Archives Division

- Hagedorn, Daniel P. "Postscript with a Vengeance," *Journal of the American Aviation Historical Society*, Vol. 43, No. 3, Fall 1998.

### Center for Earth and Planetary Studies

- Bell, J.F., B.A. Campbell, and M.S. Robinson. Planetary Geology, *Manual of Remote Sensing*, 3, (1999): 509–564.
- Bourke, M.C., and G. Pickup. Fluvial Form Variability in Arid Central Australia, in *Varieties of Fluvial Forms* (Miller, A. and Gupta, A., eds.) Wiley, (1999): 248–271.
- Bulmer, M.H., and J.B. Wilson. "Comparison of flat-topped stellate seamounts on Earth's seafloor with stellate domes on Venus using side-scan sonar and Magellan synthetic aperture radar." *Earth and Planet. Sci. Letters*, 171, (1999): 277–287.
- Campbell, B.A. Surface formation rates and impact crater densities on Venus, *J. Geophys. Res.*, 104, (1999): 21951–21956.
- Campbell, B.A., D.B. Campbell, and C. DeVries. Surface processes in the Venus highlands: Results from analysis of Magellan and Arecibo data, *J. Geophys. Res.*, 104, (1999): 1897–1916.
- Goetz, S. J., S.D. Prince, S.N. Goward, M.M. Thawley, J. Small, and A.K. Johnston. Mapping net primary production and related biophysical variables with remote sensing: Application to the BOREAS region, *J. Geophys. Res.*, 104(D22), (1999) 27719–27734.

- Harmon, J.K., R.E. Arvidson, E.A. Guinness, B.A. Campbell, and M.A. Slade. Mars mapping with delay-Doppler radar, *J. Geophys. Res.*, 104, (1999): 14065–14090.
- Shepard, M.K., and B.A. Campbell. Radar scattering from a self-affine fractal surface: Near-nadir regime, *Icarus*, 141, (1999): 156–171.
- Watters, T.R., and M.S. Robinson. Lobate Scarps and the martian crustal dichotomy, *J. Geophys. Res.*, 104, (1999): 18981–18990.
- Watters, T.R., M.S. Robinson, and A.C. Cook. Topography of lobate scarps on Mercury: New constraints on the planet's contraction, *Geology*, 26, (1998): 991–994.
- Zimelman, J.R. Emplacement of long lava flows on planetary surfaces, *J. Geophys. Res.*, 103, B11, (1998): 27503–27516.

### Space History Division

- Ceruzzi, Paul. "Inventing Personal Computing." *The Social Shaping of Technology*, no. 2, edited by Donald Mackenzie and Judy Wajcman. (Philadelphia: Open University Press, 1999): 64–86.
- . "Y2K: Old Hat in New Technology." *Washington Post*, (Washington, DC, January 11, 1999): A19.
- . "Review of Frederick Seitz and Norman G. Einspruch, *Electronic Genie*." *ISIS* 903 (Urbana, University of Illinois, 1999): 633–34.
- . "The 'Mind's Eye' and the Computers of Seymour Cray." *Artefact*. (Washington, DC: National Museum of American History, 1999): 2.
- Collins, Martin. *Space Race: The US-USSR Competition to Reach the Moon*. San Francisco, CA: Pomegranate, 1999.
- DeVorkin, David. "Ozone. Scientific Rocketry to Sputnik Scientific Instruments, and Solar Constant." In *Garland History of Geophysics*, edited by G. Good. Garland, 1999.
- . "The Discovery and Exploitation of Spectroscopic Parallaxes' Revisited." L. Davis Press, 1999.
- . "The Pickering Years," *The American Astronomical Society's First Century*." AIP, 1999.
- . "The Post-War Society: Responding to New Patterns of Patronage." *The American Astronomical Society's First Century* (with Paul Routly). (AIP, 1999).
- Herken, Gregg. Review: "Campbell Craig's *Destroying the Village and Andreas Wenger's Living with Peril*." *American Historical Review* (June 1999).
- . "The University of California, the Federal Weapons Labs, and the Founding of the Atomic West." *The Atomic West*, edited by Hevly and Findlay. (University of Washington Press, 1999).
- Neufeld, Michael. "Ehrlicke, Kraft Arnold." *American National Biography*, (New York: Oxford University Press VII, 1999): 354–55.
- . "Mythos Peenemunde Reflektionen aus Internationaler Sicht." *Peenemunde: Facetten Eines Historischen Orts*, (Schwerin: Landeszentrale fuer politische Bildung Mecklenburg-Vorpommern, 1999): 8–14.

- . Review of *Heisenberg and the Nazi Atomic Bomb Project: A Study in German Culture* by Paul Lawrence Rose. *Physics in Perspective* 1 (1999).
- . Review of *Wernher von Braun: The Man Who Sold the Moon* by Dennis Piskiewicz. *Air and Space Smithsonian* 14 (August/September 1999): 82–83.
- . "Rocket Aircraft and the 'Turbojet Revolution': The Luftwaffe's Quest for High Speed Flight 1935–1939." *Innovation and the Development of Flight*, edited by Roger D. Launius (College Station: Texas A&M University Press, 1999): 207–34.
- . "The Road to Peenemunde." *The Quarterly Journal of Military History* 11 (Winter 1999): 72–77.
- Winter, Frank. "Memorial to Thomas F. Dixon, A Major Rocket Pioneer." *Journal of the British Interplanetary Society* 52, no. 7/8 (July–August 1999): 271–72.
- . "The Influence of the von Opel-Valier Experiments Upon German Rocket Propelled Model Aircraft Development, 1920's–1930's." *Journal of the British Interplanetary Society* 52, no. 7/8 (July–August 1999): 267–70.

## National Museum of African Art

- Binkley, David A. *Afrika-Kunst und Kultur, Meisterwerke afrikanischer Kunst, Musum fur Volkerkunde Berlin*. Prestel, 1999. Essays on Kuba figurative cups and pipes.
- Geary, Christraud M. "Coronation Mask" p. 303; "Elephant Mask" p. 304. John Nunley and Cara McCarty (eds.). *Masks: Faces of Culture*. The St. Louis Art Museum. New York: Harry Abrams, 1999: 303, 304.
- Hall, Robert and Edward Lifschitz. *Wrapped in Pride: Ghanaian Kente and African American Identity*. National Museum of African Art, 1998.
- Jenke, Veronika. *Educational Programs, Fall 1998–Summer 1999*. National Museum of African Art, 1998.

## National Museum of American Art (Smithsonian American Art Museum)

- Adamson, Jeremy Elwell. "Antique American Rattan." *Tropical Gardner* 1 (Winter 1998): 23–30.
- Broun, Elizabeth. "Richard Diebenkorn's Ocean Park No. 6." *American Art* 13 no. 2 (Summer 1999): 80–83. <http://nmaa-ryder.si.edu/journal/v13n2>
- . "Childe Hassam's America." *American Art* 13 no. 3 (Fall 1999): 33–37. <http://nmaa-ryder.si.edu/journal/v13n3>
- . "Telling the Story of America." *American Art* 13 no. 3 (Fall 1999): 84–92. <http://nmaa-ryder.si.edu/journal/v13n3>
- Foley, Jeana, Virginia Mecklenburg, et al. "An Edward Hopper Scapbook." <http://www.AmericanArt.si.edu/Hopper>. September 1999.
- Hartigan, Lynda Roscoe. "Joseph Cornell." *Grand Street* 66 (October 1998): 32–42.

- Moser, Joann. "Why Draw?" In *The Dillard Collection of Art on Paper*. Greensboro, N.C.: Weatherspoon Art Gallery, 1999: 7–14.
- Murray, Richard. "Abbott Thayer's Stevenson Memorial." *American Art* 13, no. 2 (Summer 1999): 3–25.
- . "Abbott Thayer: The Nature of Art." Brochure for SAAM exhibition "Abbot Thayer: The Nature of Art."
- . Captions for brochure "American Art from the Gilded Age," on loan to the Vice President's Residence.
- Stahl, Joan. "Women Artists: The Other Side of the Picture." *MC Journal* [computer file] *The Journal of Academic Media Librarianship* 1999.
- . "Andrew Wyeth: Self Portrait: Snow Hill." *MC* [computer file] *The Journal of Academic Media Librarianship* (1999).
- . "Fritz Scholder: Painting the Paradox (Artists of America Series)." *MC* [computer file] *The Journal of Academic Librarianship* (1999).
- . "The People's Painting." *MC* [computer file] *The Journal of Academic Librarianship* (1999).
- . "Discover Irish Art at the National Gallery of Ireland" [review]. *Art Libraries Journal* 25:3 1999: 47.
- Trapp, Kenneth R. *Essay in Larry Kirkland, Twenty-Five Years*. Denver: Lightwater, 1999.
- . "Crafts in Crisis" [sound recording, lecture]. *The Future Lies in Education*. Cleveland, Ohio: Cleveland Institute of Art, 1999.
- Truettner, William H. and Roger B. Stein, eds. *Picturing Old New England: Image and Memory*. New Haven: Yale University Press, 1999.

## National Museum of American History

### Office of the Director

- Crew, Spencer R. "A Museum Perspective on *The Presence of the Past*." *The Public Historian*. Vol. 22, No. 1 (Winter 2000).
- . "Introduction." *We Americans Celebrating a Nation: Its People, and Its Past*. Ed. by Thomas B. Allen and Charles O. Hyman. Washington DC: National Geographic Society, 1999.
- Morris, Martha. "Organizational Health," in *New Standard*. American Association of Museums, 1999.
- . "Planning for Collections," in *Manual of Museum Planning*. Stationary Office, London, 1999.

### Office of Curatorial Affairs

- Bunch, Lonnie G., III. "In Museums at the National Level: Fighting the Good Fight," in *Public History: Essays from the Field*. James B. Gardner and Peter S. LaPaglia, eds. Krieger Publishing Company, 1999.
- . "Neither Black, nor White: Interpreting African American Culture in Contemporary Museums," in *The Long-Term View*. Massachusetts School of Law 4 (1999).



## Department of History

- Gardner, James B., and Peter S. LaPaglia, eds. *Public History: Essays from the Field*. Krieger Publishing Company, 1999.
- Kondratas, Ramunas. "Prototype Thermal Cycler for PCR, 'Mr. Cycle' (1985)," in *Bulletin of the Scientific Instrument Society* 63 (1999).

## Archives Center

- Haberstich, David E. *The Scurllock 90-Year Project: Black Washington in Black America*, Exposure, Vol. 32.1 (1999), pp. 64–73.
- Jackson, Reuben. *Julius Hemphill*, International Dictionary Of Black Composers, by Samuel Floyd and the Center for Black Music Research, eds. Fitzroy Dearborn Publishers, 1999.
- Minnick, Mary Louise. *The Breck Girls*, in *Smithsonian Magazine*, December, 1999.
- Ruffins, Fath. *Sites of Memory, Sites of Struggle: The 'Materials' of History*, in Major Problems in African American History, pp. 65–86. Volume One. From Slavery to Freedom 1619–1865. Thomas Holt and Elsa Barkley Brown, eds. Houghton Mifflin Co., 1999.
- Schwartz, Scott. *Faith, Serpents, Fire: Images of Kentucky Holiness Believers*, University of Mississippi Press, 1999.

## Department of Information Technology & Society

- Briscoe, Nance. *Science Service Smithsonian* (1999) (Web site).
- Clain-Stefanelli, Elvira. *Life in Republican Rome on its Coinage* (1999).
- Finn, Bernard S. (coeditor with Robert Bud and Helmuth Trischler) "Manifesting Medicine: Bodies and Machines," Vol. 1 of *Artefacts: Studies in the History of Science and Technology* (London: Harwood Academic Publications, 1999).
- . *Edison After Forty* (1999) (Web site).
- Forman, Paul. "I.I. Rabi's 'Souvenir' of His Career in Molecular Beam Research (1937)," "Electromagnetic Cavity in which Nuclear Magnetic Resonance was First Observed in Condensed Matter (1945)," "Atomic Clock Based upon Absorption of Microwaves in Ammonia, Constructed at the U.S. National Bureau of Standards (1948–49)," in Deborah J. Warner, ed., "Ten 20th Century Instruments at The Smithsonian in Washington, D.C.," *Scientific Instrument Society Bulletin*, No. 63 (Dec. 1999), pp. 14–22.
- . "Ciencia y humanidades en la postmodernidad," *Revista de Occidente*, nr 213 (Madrid, Feb. 1999), pp. 110–121.
- Kidwell, Peggy. *Scientific Instruments, 1500–1900: An Introduction*, by Gerard L'E. Turner, reviewed in *Isis*, 90:582–583 (1999).
- . Short reviews in the *Annals of the History of Computing* (1999).
- Mudd, Douglas. "Numismatic Art Comes of Age: The Demareteion Master" (1999) (Web page).

- Sherman, Roger. *Joseph Henry's Contributions to the Electro-magnet and the Electric Motor*, (Joseph Henry Papers Web page).
- Wallace, Hal; Finn, Bernard S.; Allison, David K. *Powering A Generation of Change* (1999) (Web site).

## Department of Social History

- Bird, William L., Jr. *Better Living: Advertising, Media and the New Vocabulary of Business Leadership, 1935–1955*. Evanston, Illinois: Northwestern University Press, 1999.
- Kidwell, Claudia, Brush "Making Choices: The Real and Pictorial Dresses of Margaret Marston Philipse Ogilvie (1727–1807)," *The 44th Washington Antiques Show Catalog* (pp. 86–93), 1999.
- Liebhold, Peter and Harry R. Rubenstein. *Between a Rock and a Hard Place: A History of American Sweatshops, 1820–Present*. Los Angeles: UCLA Asian American Studies Center and Simon Wiesenthal Center, Museum of Tolerance, 1999.

## Department of Science, Medicine & Society

- Gossel, Patricia. "When Bacteriologists Wore Black," *ASM (American Society for Microbiology) News* [Centennial Edition] 65:5 (May 1999): 296–301.
- . "Packaging the Pill," in *Manifesting Medicine: Bodies and Machines*, Robert Bud, Bernard Finn and Helmuth Trischler, eds. (Amsterdam: Harwood Academic Publishers, 1999), pp. 105–121.
- . "Edwin Oaks Jordan," "Veranus A. Moore," "Frederick George Novy," "Theophil Mitchell Prudden," "George Miller Sternberg," "Daniel Elmer Salmon," "Mazyck Porcher Ravenel," and "Simon Flexner," *American National Biography* (Oxford University Press, 1999).
- . "Biostic Particle Delivery System, Cornell/Stanford 'Gene Gun' in *Bulletin of the Scientific Instrument Society* No. 63 (1999): 21–22.
- Ott, Katherine. "All the Modern Conveniences: Household Plumbing, 1840–1890," *Bulletin of the History of Medicine*, v. 73 (1999): 336–338.
- Turner, Steven. "Dobsonian Telescope, 1982," in *Bulletin of the Scientific Instrument Society* 63 (1999): 20.
- Warner, Deborah J. *Franklin & His Friends. Portraying the Man of Science in Eighteenth-Century America*, by Brandon Fortune with Deborah Warner, published by the National Portrait Gallery in association with the University of Pennsylvania Press, 1999.
- . "The Ballast-Office Time Ball and the Subjectivity of Time and Space," in *James Joyce Quarterly* 35 (1998): 861–864.
- . "Ten 20th Century Instruments at The Smithsonian in Washington, D.C." in *Bulletin of the Scientific Instrument Society*, 63 (1999): 14–22.

## Department of History of Technology

- Johnson, Paula. "Boat Models, Buoys, and Board Games: Reflecting and Reliving Watermen's Work," in *Material History Review* 48 (Fall 1998).

- Lubar, Steven. "Archives and Information Culture, in *American Archivist*, Spring 1999.
- . "Men, Women, Production, Consumption," in *His and Hers: Gender and American Consumerism, 1900–1960*. Arwen Mohun and Roget Horwitz, eds. University of Virginia Press, 1998.
- Liebhold, Peter, and Steven Lubar. "What Do We Keep?" *Invention and Technology*, Spring 1999, vol. 14, no. 4, pp. 28–38.
- , and Harry Rubenstein. *Between a Rock and a Hard Place: A History of American Sweatshops, 1820–Present*, 1999 UCLA Asian American Studies Center, Los Angeles, CA.
- Stine, Jeffrey K., and Joel A. Tarr. "At the Intersection of Histories: Technology and the Environment," in *Technology and Culture* 39, October 1998.
- Withuhn, William. "Risk and Failed Expectations..." *Railroad History*, Fall 1999.

### Department of Social History

- Ellis, Rex. "The Underground Railroad," in *Potomac Review*, Fall 1999.
- Green, Rayna. "A Modest Proposal: The Museum of the Plains White Person," in *Our Own Words: Great Speeches of the American Century*. Senator Robert Torricelli, Andrew Carroll, and Andrew Dubhill, eds. Kodansha America, Inc., 1999.
- . "More Than Meets the Eye: Gertrude Kasebier's "Indian" Photographs," *The History of Photography*. Helena Wright, ed. Taylor & Francis Ltd., 1999.
- . "Rosebuds of the Plateau: Frank Matsura and the Fainting Couch Aesthetic," *Dark Night: Field Notes*, 1999.
- with Melanie Fernandez. *The British Museum Encyclopedia of Native North America*. British Museum Press, 1999.
- Hasse, John. "Bringing Out the Best in Ellington: From 10,000 Recordings, Here are a Chosen Few," *The Washington Post*, April 11, 1999.
- . "Ellington at 100: Genius Beyond Category," *Jazz Educators Journal*, March 1999.
- . "Introduction," *The Stardust Road & Sometimes I Wonder: The Autobiographies of Hoagy Carmichael*. Da Capo Press, 1999.
- . "Select Discography," *Duke Ellington: A Spiritual Biography*. Jana Steed. Crossroads Publishing, 1999.
- McGovern, Charles, Susan Strasser, and Mattias Judy, eds. *Getting and Spending: European and American Consumer Societies in the Twentieth Century*. Cambridge University Press, 1999.
- . "Woody Guthrie's American Century," *Hard Traveling: The Life and Music of Woody Guthrie*. Robert Santelli and Emily Davidson, eds. Wesleyan University Press, 1999.
- Rand, Harry. *American Dreamer: The Art of Phillip C. Curtis*. The Phoenix Art Museum, 1999.

- . "Apostolic Succession and Recent Art," *Cuttle et Culture: Studies in Cultural Meaning*, Universite de Cergy-Pontoise, 1999.
- . "What the Kitchen Maid Made: Vermeer's Kitchen Maid," *Bulletin van Het Rijksmuseum*, 1999.

### Department of Interdisciplinary Initiatives

- Molella, Art. (co-editor). *Research Budgets in an Age of Limits* (Nomos Verlagsgesellschaft, 2000).

### Lemelson Center

- Bedi, Joyce. Introduction to Ch. 2 of *Research Budgets in an Age of Limits* (Nomos Verlagsgesellschaft, 2000).
- . "Lady Edisons" *Inventors Digest*, Sept./Oct. 1999.
- . "Laser Patent Wars" *Inventors Digest*, May/June 1999.
- Jennings, Gretchen. "Too Hot to Handle: Museums and Controversy;" "The Museum as a Public Place;" "Bridging Diversity, Building Community: Folkloric Models of Museum Interpretation," *Journal of Museum Education*, 1999.
- Satrom, Heather Bruce. "Girl Tech: Cool Toys for Girls" *Inventors' Digest*, Jan./Feb. 1999.
- . "Newman Darby: The Original Windsurfer," *Inventors Digest*, July/August 1999.
- . "A Life of Innovation: Charles Townes," *Inventors Digest*, Sept./Oct. 1999.

### Office of Public Services

#### Education and Visitor Services

- Grove, Tim. "I Never Knew History Could be So Fun: Visitor Experiences in the Hands-On-History Room," *History News* (Autumn 1999).

## National Museum of the American Indian

### Office of Public Programs

- The Cultural Resource Center* videotape was produced to present a behind-the-scenes look at how the staff of this facility deals with the unique challenges of handling and housing Native American artifacts. In addition, the tape provides an introduction to the National Museum of the American Indian. The videotape was created to show potential visitors what the center is and how it functions within the NMAI. Executive producer, Charlotte Heth; project manager, Machel Monenerkit; producer, Daniel Davis; director, Tarik Benbrahim. *The Cultural Resource Center* was completed in 1999.
- Secakuku, Susan. "Real Village Kids: Photographs by Hopi Youth." exhibition at the Hopi Cultural Center Museum, Second Mesa, AZ, October 5–December 17, 1999.

### Office of Curatorial Affairs

- Delgado, Rachel. Book review, *Journal: Discourse: New Directions in the Four Fields of Anthropology*. Nov. 1999, Vol. 1, No. 1, Visayan Vignettes: Ethnographic Traces of a Philippine Island by Jean-Paul Dumont.
- . "Nim Po't: A Museum of Traditional Maya Textiles." *Fiber Arts Magazine*, (Nov./Dec. 1999).
- Krutak, Lars. "St. Lawrence Island Joint-Tattooing: Spiritual/Medicinal Functions and Inter-Continental Possibilities." *Etudes/Inuit/Studies* 23(1-2): 229-252.

### Office of Publications

- National Museum of the American Indian, Smithsonian Institution. *When the Rain Sings: Poems by Young Native Americans*. New York: Simon & Schuster Books for Young Readers, 1999.
- "National Museum of the American Indian: Memory & Imagination: The Legacy of Maidu Indian Artist Frank Day and Coyote Bites Back: Indian Humor" (CD). American Indian Radio on Satellite (AIROS).

### National Museum of Natural History

- Bannikov, A. F. and J. C. Tyler. "Sorbinicapros, a New Second Taxon of the Caproid-related Fish Family Sorbinipercidae, from the Eocene of Monte Bolca, Italy." *Museo Civico Storia Naturale Verona, Studi e Ricerche sui Giacimenti Terziari di Bolca* 8 (1999): 129-142.
- Tyler, J. C. and D. M. Tyler. "Natural History of the Sea-Fan Blenny, (*Emblemaropsis pricei*) (Pisces: Chaenopsidae) in the Western Caribbean." *Smithsonian Contributions to Zoology* 601 (1999): 1-24.
- Tyler, J. C. and R. Winterbottom. "A Review of the Morphology and Relationships of the Oligocene Spikefish Genera *Acanthopleurus* Agassiz 1844 and *Cryptobalistes* Tyler 1968 (Tetraodontiformes: Triacanthidae). *Paläontologische Zeitschrift (Stuttgart)* 73 (3/4) (1999): 351-367.
- Tyler, J. C. and C. Sorbini. "Phylogeny of the Fossil and Recent Genera of Fishes of the Family Scatophagidae (Acanthuroidei)." *Bollettino del Museo Civico di Storia Naturale di Verona* 23 (1999): 353-393.
- Tyler, J. C. "A New Family for a Long Known but Undescribed Acanthopterygian Fish from the Eocene of Monte Bolca, Italy." *Ecologae Geologicae Helveticae (Jour. Swiss Geol. Soc.)* 91 (1999): 521-540.
- . "A New Genus and Species of Surgeon Fish (Acanthuridae) with a Unique Dorsal-fin Pterygiophore Arrangement from the Eocene of Monte Bolca, Italy." *Museo Civico Storia Naturale Verona, Studi e Ricerche sui Giacimenti Terziari di Bolca* 8 (1999): 245-256.
- . "A New Genus and Species of Surgeon Fish (Acanthuridae) with Four Dorsal-fin Spines from the Eocene of Monte Bolca, Italy." *Museo Civico Storia Naturale Verona, Studi e Ricerche sui Giacimenti Terziari di Bolca* 8 (1999): 257-268.
- , ed. *Museo Civico Storia Naturale Verona, Studi e Ricerche sui Giacimenti Terziari di Bolca* 8, 1999.

### Department of Anthropology

- Afable, Patricia. "Notes on the History of the Agno River and the Dams." *Baguio Midland Courier* 52.5:11, 20 (January 31, 1999), 52.6:8, 19 (February 7, 1999), 52.7:12, 24 (February 14, 1999).
- . "Eduardo Masferré's Subjects: A Century of Self-Representations in the Philippines." *Anales del Museo Nacional de Antropología* 1998 (1999).
- . "Kalanguya Sung Poetry as a Cultural Resource." *Proceedings of the Third European Conference on Philippine Studies (Aix-en-Provence, April 1997)* (1999).
- Archambault, JoAllyn. *Gallup Ceremony and Visual Imagery*. Washington, D.C.: Smithsonian Institution Press, 1999.
- Arnoldi, Mary Jo. "Yaya Coulibaly: Contemporary Malian Artist and Puppeteer." *Puppetry International* 4 (1998): 8-11.
- . "Overcoming a Colonial Legacy: The New National Museum in Mali: 1976 to the Present." *Museum Anthropology* 22(3) (1998): 28-40.
- Billeck, William. "Fluted Point Distribution in the Loess Hills of Southwestern Iowa." *Plains Anthropologist* 43 (1998): 401-409.
- Damann, F. E., E. Miller, E. B. Jones and D. H. Ubelaker. "Temporal Trends in Morbidity in the Chesapeake Bay Area: Part One. Samples, Methodology, and Context (abstract)." *American Journal of Physical Anthropology Supplement* 28 (1998), 114.
- Ditchfield, P., J. Hicks, T. Plummer, L. Bishop, and R. Potts. "Current Research on the Late Pliocene and Pleistocene Deposits North of Homa Mountain, Southwestern Kenya." *Journal of Human Evolution* 36 (1999): 123-150.
- Fitzhugh, William W., ed. *Arctic Studies Center Newsletter*. Washington, D.C.: Arctic Studies Center, Department of Anthropology, National Museum of Natural History, Smithsonian Institution, ongoing publication.
- Fitzhugh, William W. and Chisato Dubreuil, eds. *Kamuy: Spirit of a Northern People*. Washington, D.C.: Arctic Studies Center, National Museum of National History, Smithsonian Institution, 1999.
- Fitzhugh, William W., Natalia Fedorova, and Pavel A. Kosintsev. *Gone into the Hills: Culture of the Northwestern Yamal Coast Population in the Iron Age*. Russian Academy of Science, Ural Division, Institute of History and Archaeology; Institute of Plant and Animal Ecology; Arctic Studies Center, Smithsonian Institution. Ekaterinburg Publishers, 1998.
- Hansen, Greta, and Catherine Zwiesler Sawdey. "A Moving Experience: Thirteen Years and Two Million Objects Later." *Curator: The Museum Journal* 42(1) (1999): 13-35.

- Houchins, Chang-su. "Romyrn Hitchcock and the Smithsonian Ainu Collection" *Ainu Spirit of a Northern People* (1999): 148-154.
- Hunt, David R. "History and Demography of the Robert J. Terry Anatomical Collection" (abstract). *American Journal of Physical Anthropology* Supplement 28 (1999): 156-157.
- Kaupp, P. Ann, Ruth O. Selig, Alison S. Brooks, JoAnne Lanouette, eds. *AnthroNotes*. Washington, D.C.: Department of Anthropology, National Museum of Natural History, Smithsonian Institution, ongoing publication.
- Kraker, James, David Rosenthal, and Deborah Hull-Walski. "Managing a Scholarly Resource: Archaeological Collections at the National Museum of Natural History." *Museum Anthropology* 23(2) (1999).
- Loring, Stephen. "The Archaeology of Eskimo Hütte (IkDb-2): Inuit Sovereignty in the Torngat." *Etudes Inuit* 22(2) (1999): 53-76.
- McQuail, Lisa. "Gifted Hands." *Sawasdee Magazine* 27(2) (1998): 40-44.
- Meggers, Betty J. "La Difusión de la Cerámica Temprana en Sudamérica." *XII Congreso Nacional de Arqueología Argentina, Actas, Tomo I* (1999): 17-38.
- . "The Travels of a Worm." *Discover* 20(2) (1999): 12.
- . "La Utilidad de Secuencias Cerámicas Seriadadas para Inferir Conducta Social Prehistórica." *El Caribe Arqueológico* 3 (1999): 3-19.
- . "Review of Philippe Descola, in the Society of Nature: a Native Ecology in Amazonia." *Journal of the Royal Anthropological Institute* 5 (1999): 119-120.
- Miller, E., F. E. Damann, D. H. Ubelaker, and E. B. Jones. "Temporal Trends in Morbidity in the Chesapeake Bay Area: Part Two. Data and Conclusions" (abstract). *American Journal of Physical Anthropology* Supplement 28 (1999): 203.
- Mudar, Karen M. "How Many Dvaravati Kingdoms? Locational Analysis of First Millennium, A.D. Moated Settlements in Central Thailand." *Journal of Anthropological Archaeology* 18 (1999): 1-28.
- Ortner, Donald J. "Scurvy: Its Skeletal Manifestations and Prevalence in North and South American Skeletal Samples" (abstract). *American Journal of Physical Anthropology* Supplement 28 (1999): 216.
- Ortner, Donald J., E. Kimmerle, and M. Diez. "Skeletal Evidence of Scurvy in Archeological Skeletal Samples from Peru." *American Journal of Physical Anthropology* 108 (1999): 321-331.
- Plummer, T., L. Bishop, J. Kingston, N. Sikes, P. Ditchfield, F. Hertel, and J. Ferraro. "Reconstructing Oldowan Hominid Paleoecology." *Journal of Human Evolution* 36 (1999): A18.
- Potts, Richard. "Humanity's Descent." *Reading between the Lines: Toward an Understanding of Current Social Problems*. A. Konradi and M. Schmidt, eds. London: Mayfield, 1998, pp. 507-515.
- . "Variability Selection in Hominid Evolution." *Evolutionary Anthropology* 7 (1998): 81-96.
- . "Environmental Hypotheses of Hominid Evolution." *Yearbook of Physical Anthropology* 41 (1998): 93-136.
- . "Behavioral Response to Variable Pleistocene Landscapes." *The Archaeology of Intelligence*. A. Nowell, ed. New York: Cambridge University Press.
- . "Human Evolution." Encarta. Microsoft Corp. Online Encyclopedia.
- Scherer, Joanna C. "Review of Navajo and Photography: A Critical History of the Representation of an American People, by James C. Faris." *Visual Anthropology Review* 14(10) (1998): 97-99.
- . "Review of Drawing Shadows to Stone: The Photography of the Jesup North Pacific Expedition, 1897-1902, by Laurel Kendall, Barbara Mathe, Thomas Ross Miller, with Stanley A. Freed, Ruth S. Freed and Laila Williamson." *American Indian Culture and Research Journal* 23(4) (1999).
- Selig, Ruth Osterweis. "Human Origins: One Man's Search for the Causes in Time." *AnthroNotes* 21(2) (1999): 1-9.
- Sikes, N.E. and K.M. Stewart, eds. "Early Hominid Behavioural Ecology." *Journal of Human Evolution* 27 (1999): 25-45.
- . "Plio-Pleistocene Floral Context and Habitat Preferences of Sympatric Hominid Species in East Africa." *African Biogeography, Climate Change, and Early Hominid Evolution*. T. Bromage and F. Schrenk, eds. Oxford: Oxford University Press, 1999, 301-315.
- Sikes, N. E., R. Potts, and A. K. Behrensmeyer. "Early Pleistocene Habitat in Member 1 Olorgesailie, Based on Paleosol Stable Isotopes." *Journal of Human Evolution* (1999).
- Singleton, Theresa. "The Archaeology of African-American Life." *Anthropology Explored: the Best of Smithsonian's AnthroNotes*. R. O. Selig and M. R. London, eds. Washington, D.C.: Smithsonian Institution Press, 1998, 205-215.
- . "Cultural Interaction and African American Identity in Plantation Archaeology." *Culture Contact, Interaction, and Change*. John Cusick, ed. Southern Illinois University Press, 1998, 172-188.
- . "The Slave Trade Remembered on the Former Gold and Slave Coasts." *Slavery and Abolition* 20(1) (1999): 150-169.
- , ed. *I, too, am America: Archaeology of African-American Life*. Charlottesville: University Press of Virginia, 1999.
- Speaker, John Stuart. "The Human Remains of Ishi, a Yahi-Yana Indian, in the National Museum of Natural History, Smithsonian Institution: Report and Recommendations for Repatriation." <http://www.nmnh.si.edu/anthro/ishirpt.htm> (31 May 1999).
- . "Excavations at Mounds 693 and 985." *Classic Period Mixtequilla, Veracruz, Mexico: Diachronic Inferences from Residential Investigations*. Barbara L. Stark, ed. Albany: SUNY Albany, 1999.
- Sturtevant, William C. "Foreword." *Collecting Native America*. Shepard Krech III and Babara Hail, eds. Washington, D.C.: Smithsonian Institution Press, 1999.
- Ubelaker, Douglas H. "Aleš Hrdlicka's Role in the History of Physical Anthropology." *Journal of Forensic Sciences* 44(4) (1999): 708-714.

- . “Ancient Disease in Anthropological Context.” *Digging for Pathogens*. Charles L. Greenblatt, ed. Jerusalem: Center for the Study of Emerging Diseases, 1999, 175–199.
- . “Angel, John Lawrence.” *American National Biography*. John A. Garraty and Mark C. Carnes, eds. New York: Oxford University Press, 1999, 518–519.
- . “Contributions of T. Dale Stewart to Forensic Anthropology” (abstract). *Proceedings of the American Academy of Forensic Sciences* 5 (1999): 234.
- . “Review of Craniofacial Identification.” *Forensic Medicine*. John G. Clement and David L. Ranson, eds. 21(1) (1999): 46–47.
- , ed. “My Work in Forensic Anthropology at the Smithsonian,” by T. Dale Stewart, deceased (abstract). *Proceedings of the American Academy of Forensic Sciences* 5 (1999): 236.
- Walsh, Jane MacLaren, Pamela M. Henson, Margaret R. Dittmore, and Michael LeClair. “Expeditions—150 Years of Smithsonian Research in Latin America. Expediciones—150 Años de Investigación en América Latina (A bilingual virtual exhibit).” <http://www.nmnh.si.edu/anthro/laexped/> (20 December 1999).
- ### Department of Botany
- Acevedo-Rodríguez, P. “*Paullinia lingulata* (Sapindaceae), a New Species from French Guiana.” *Brittonia* 50 (1998): 514–516.
- . “West Indian Novelties I: a New Species of *Marsdenia* (Asclepiadaceae) from Puerto Rico and a New Name for a Jamaican Species of *Calyptanthus* (Myrtaceae).” *Brittonia* 51 (1999): 166–169.
- Adey, W. “Algal-controlled Ecosystems in Oligotrophic Seas: Keys to Coral Reef Evolution and Degradation” (abstract). *16th International Botanical Congress* 19.10.1 (1999): 236.
- Aymard C., G., L. J. Dorr and N. Cuello. “*Rudgea tayloriae* (Rubiaceae), an Unusual New Species from the Eastern Slopes of the Venezuelan Andes.” *Novon* 9(3) (1999): 315–317.
- Bayer, C. and L. J. Dorr. “A Synopsis of the Neotropical Genus *Pentaplaris*, with Remarks on its Systematic Position Within Core Malvales.” *Brittonia* 51(2) (1999): 134–148.
- Borgen, L., W. Greuter, D. H. Hawksworth, D. H. Nicolson and B. Zimmer. “Proposals to Implement Mandatory Registration of New Names.” *Taxon* 47 (1998): 899–904.
- Carr, G. D., R. M. King, A. M. Powell and H. Robinson. “Chromosome Numbers in Compositae.” *Amer. J. Bot.* 86(7) (1999): 1003–1013.
- Chaloner, W. G., W. Greuter, D. H. Nicolson and A. Traverse. “Proposals Regarding the Nomenclature of Fossil Plants.” *Taxon* 47 (1998): 907–910.
- Clarke, H. D., V. Funk, and T. Hollowell. “Comparative Floristic Diversity of the Iwokrama Reserve, Guyana” (abstract). *International Botanical Congress Abstracts* 456 (1999).
- Dematteis, M. and Robinson, H. “Chromosome Studies and Taxonomic Considerations in *Acilepidopsis* (Vernoniaeae, Asteraceae).” *Phytologia* 83(5) (1998): 366–370.
- DePriest, P. T. “Smith, Gilbert Morgan (6 January 1885–11 July 1959).” J. A. Garraty and M. C. Carnes (eds.). *American National Biography*, Vol. 24. New York: Oxford University Press, 1999, 188–189.
- . “True, Frederick William (8 July 1958–25 June 1914).” J. A. Garraty and M. C. Carnes (eds.). *American National Biography*, Vol. 24. New York: Oxford University Press, 1999, 853–854.
- . “Stejneger, Leonhard Hess (30 Oct. 1851–28 Feb. 1943).” J. A. Garraty and M. C. Carnes (eds.). *American National Biography*, Vol. 24. New York: Oxford University Press, 1999, 648–649.
- . “Development of Mason E. Hale’s List of Epithets in the Parmelioid Genera (Lichen-forming Ascomycotina): A Bibliographic Review” (abstract). *Bryologist* 102 (1999): 442–461.
- . “Robbins, William Jacob (February 22, 1890–October 5, 1978).” J. A. Garraty and M. C. Carnes (eds.). *American National Biography*, Vol. 24. New York: Oxford University Press, 1999, 588–590.
- Dorr, L. J. “John J. Wurdack (1921–1998)” (obituary). *Taxon* 47(4) (1998): 971–973.
- . “A New Name in *Begonia* (Begoniaceae) from China.” *Harvard Papers in Botany* 4(1) (1999): 265.
- . “A New Combination in *Croizatia* (Euphorbiaceae).” *Sida* 18(3) (1999): 831–836.
- . “The Botanical Documentary Record.” Anonymous. *XVI International Botanical Congress, Abstracts*, 1999.
- . “Sterculiaceae.” P. M. Jørgensen and S. León-Yáñez (eds.). *Monogr. Syst. Bot. Missouri Bot. Gard.* 75 (1–1181) (1999): 918–922.
- . “Notes on *Begonia* (Begoniaceae) in the Venezuelan Andes.” *Harvard Papers in Botany* 4(1) (1999): 253–264.
- . “Review of: *Clave Para los <P>199>rboles de los Llanos de Venezuela Basada en Características Vegetativas* by R. F. Smith et al.” *Taxon* 48(2) (1999): 434–435.
- . “Tiliaceae.” P. M. Jørgensen and S. León-Yáñez (eds.). *Monogr. Syst. Bot. Missouri Bot. Gard.* 75 (1–1181) (1999): 926–927.
- Dorr, L. J. and E. G. H. Oliver. “New Taxa, Names, and Combinations in *Erica* (Ericaceae-Ericoideae) from Madagascar and the Comoro Islands.” *Adansonia, sér.* 3, 21(1) (1999): 75–91.
- Dorr, L. J. and E. G. H. Oliver. “A New Combination in *Erica* (Ericaceae) from São Tomé.” *Kew Bulletin* 54(1) (1999): 235–236.
- Faden, R. B. “The Commelinaceae of Northeast Tropical Africa (Eritrea, Ethiopia, Djibouti, Somalia and Kenya): Diversity and Phytogeography.” Ryding, O. and I. Friis (eds.). *Abstracts to the 3rd Symposium on the Flora of Ethiopia and Eritrea*. Copenhagen: Carlsburg Academy, Ethiopian Flora Project & Botanical Museum, 1999, 3.
- Farr, Ellen R., Beatrice Wilde Hale and Paula T. DePriest. “Parmeliaceae: Searchable List of Names in the Parmelioid

- Genera (Lichens)." <http://persoon.si.edu/parmeliaceae/> (1999).
- Faust, Maria A. "Dinoflagellates in the Pelican Cays, Belize" (abstract). *53rd Annual Meeting of the Phycological Society of America* 35 (1999): 10.
- Faust, Maria A., Jacob Larsen and Ojvind Moestrup. "Potentially Toxic Phytoplankton 3. Genus *Procoentrum* (Dinophyceae)." *ICES Identification Leaflets for Plankton*. (1999): 1-24.
- Filgueiras, T. S., P. M. Peterson, and Y. Herrera-Arrieta. "*Rheobloea* (Poaceae: Chloridoideae), a New Genus from Central Brazil." *Syst. Bot.* 24 (1999): 123-127.
- Finn, M., P. Kangas and W. Adey. "Mangrove Ecosystem Development in Biosphere II." *Ecological Engineering* 13 (1999): 173-178.
- Funk, V. A. "Using Limited Data to Design a Protected Area System in Guyana" (abstract). *Southern African Society for Systematic Biology, symposium on systematics and conservation, abstracts* (1999): 22.
- Funk, V. A., M. F. Zermoglio, and N. Nasir. "Testing the Use of Specimen Collection Data and GIS in Biodiversity Exploration and Conservation Decision Making in Guyana." *Biodiversity and Conservation* 8 (1999): 727-751.
- Gacia, E., M. M. Littler, and D. S. Littler. "An Experimental Test of the Capacity of Food Web Interactions (Fish-Epiphytes-Seagrasses) to Offset the Negative Consequences of Eutrophication on Seagrass Communities." *Estuarine, Coastal and Shelf Science* 48 (1999): 757-766.
- Gemmill, C., G. Allan, W. L. Wagner, and E. A. Zimmer. "Phylogenetic Relationships and Breeding System Evolution of Insular Pacific *Pittosporum* (Pittosporaceae)" (abstract). *XVI International Botanical Congress—Abstracts* 255 (1999).
- Hale, B. W. and P. T. DePriest. "Mason E. Hale's List of Epithets in the Parmelioid Genera" (abstract). *Bryologist* 102 (1999): 462-544.
- Herbst, D.R. and W.L. Wagner. "Contributions to the Flora of Hawai'i VII." *Bishop Mus. Occas. Pap.* 58 (1999): 12-36.
- Hershkovitz, M.A., E.A. Zimmer and W.J. Hahn. "Ribosomal DNA and Angiosperm Systematics." P. Hollingsworth, R. Bateman and R. Gornall (eds.). *Molecular Systematics and Plant Evolution*. London: Taylor & Francis, Inc., 1999, 268-326.
- Hunt, D. R. and R. B. Faden. "Commelinaceae." Jørgensen, P. M and S. León-Yáñez (eds). *Catalogue of the Vascular Plants of Ecuador*. St. Louis: Missouri Botanical Garden Press, 1999, 405-407.
- Ignatov, M. S., H. Robinson, and E. A. Ignatov. "Studies on the Exostome in Brachytheciaceae (Musci)." *Arctoa* 7 (1998): 153-188.
- Jenny, M., C. Bayer and L. J. Dorr. "*Aethiocarpa* Reduced to *Harmsia* (Malvaceae, Dombeyoideae)." *Taxon* 48(1) (1999): 3-6.
- Kelloff, C. L. and V. A. Funk. "Preliminary Checklist of the Plants of Kaieteur National Park, Guyana." Washington, D.C.: BDG Program, Smithsonian Institution, 1998.
- Kim, Hyi-Gyung, V. A. Funk, and E. A. Zimmer. "Phylogenetic Inferences in the Mutisieae" (abstract). *International Botanical Congress Abstracts* 392, 1998.
- Kral, R. and M. T. Strong. "Eight Novelities in *Abildgaardia* and *Bulbostylis* (Cyperaceae) from South America." *Sida* 18 (3) (1999): 837-859.
- Kress, W.J., W. R. Heyer, P. Acevedo, J. Coddington, D. Cole, T. L. Erwin, B. J. Meggers, M. Pogue, R. W. Thorington, R. P. Vari, M. J. Weitzman, and S. H. Weitzman. "Amazonian Biodiversity: Assessing Conservation Priorities with Taxonomic Data." *Biodiversity and Conservation* 7 (1998): 1577-1587.
- Kress, W.J., J. Betancur and B. Echeverry. "Heliconias—Llamaradas de la Selva Colombiana." Bogota: Cristina Uribe Editores, 1999.
- Krupnick, G. A., K. M. Brown and A. G. Stephenson. "Fruit Production, Internal Endogenous Ethylene Levels, and Sex Expression in *Cucurbita texana*." *International Journal of Plant Sciences* 160 (1999): 321-330.
- Krupnick, G. A. and A. E. Weis. "Effect of Floral Herbivory on Male and Female Reproductive Success in *Isomeris arborea*." *Ecology* 80 (1999): 135-149.
- Krupnick, G. A., A. E. Weis and D. R. Campbell. "The Consequences of Floral Herbivory for Pollinator Service to *Isomeris arborea*." *Ecology* 80 (1999): 125-134.
- Littler, M. M. and D. S. Littler. "Castles Built by a Chiton from the Great Astrolabe Reef, Fiji." *Coral Reefs* 18(2) (1999): 158.
- Littler, M.M. and D. S. Littler. "Blade Abandonment/Proliferation: A Novel Mechanism for Rapid Epiphyte Control in Marine Macrophytes." *Ecology* 80(5) (1999): 1736-1746.
- Littler, M. M. and D. S. Littler. "Epithallus Sloughing: a Self-cleaning Mechanism for Coralline Algae." *Coral Reefs* 18(3) (1999): 204.
- Littler, M. M. and D. S. Littler. "Disturbances due to Cyclone Gavin Parallel Those Caused by a Ship Grounding." *Coral Reefs* 18(2) (1999): 146.
- Littler, M. M., D. S. Littler, and B. L. Brooks. "The First Oceanographic Expedition to Navassa Island, U.S.A.: Status of Marine Plant and Animal Communities." *Reef Encounter* 25 (1999): 26-30.
- Nicolson, D. H. "Plants Named for George Forster and/or His Father, Johann Reinhold Forster." Mathew, P. and M. Sivadasan (eds.). *Diversity and taxonomy of tropical flowering plants*. Calicut: Mentor Books, 1998, 193-200.
- . "Report of the General Committee: 8." *Taxon* 48 (1999): 373-378.
- . "Report on the Status of Proposals, Published until May 1999, to Conserve and/or Reject Names or to Oppress Works." *Taxon* 48 (1999): 391-406.
- Nowicke, J. W., M. Takahashi, and G. L. Webster. "Pollen Morphology, Exine Structure and Systematics of Acalyphoideae (Euphorbiaceae), Part 2. Tribes Agrostistachydeae (*Agrostistachys*, *Pseudagrostistachys*, *Cyttaranthus*, *Chondrostylis*), Chrozophoreae . . ." *Review of Paleobotany and Palynology* 105 (1999): 1-62.

- Pedersen, L.B. and W. J. Kress. "Honeyeater (Meliphagidae) Pollination and the Floral Biology of Polynesian *Heliconia* (Heliconiaceae)." *Plant Systematics and Evolution* 216 (1999): 1–21.
- Perry, G. and D. H. Nicolson. "Nine Proposals to Amend Art. 60 of the Code." *Taxon* 47 (1998): 933–934.
- Peterson, P. M. and J. J. Ortíz-Díaz. "Allelic Variation in the Amphitropical Disjunct *Muhlenbergia torreyi* (Poaceae: Muhlenbergiinae)." *Brittonia* 50 (1998): 381–391.
- Peterson, P. M., E. E. Terrell, E. C. Uebel, C. A. Davis, H. Scholz, and R. J. Soreng. "*Oplismenus hirtellus* Subspecies *undulatifoliosus*, A New Record for North America." *Castanea* 64 (1999): 201–202.
- Peterson, P. M. and J. Valdes-Reyna. "*Muhlenbergia jaimelintonii* (Poaceae: Chloridoideae), a New Species from Nuevo Leon, Mexico." *Sida* 18 (1999): 685–691.
- Pruski, J. F. "Compositae of the Guayana Highland—XIII. New Combinations in *Conyza* (Asteraceae), *Praxelis* (Eupatorieae), and *Riencourtia* (Heliantheae) Based on Names Proposed by L.C.M. Richard." *Brittonia* 50 (1998): 473–482.
- . "*Gurania lobata* (Cucurbitaceae), a New Combination for an Overlooked Linnaean Name." *Brittonia* 51 (1999): 326–330.
- Richardson, K. S. and V. A. Funk. "An Approach to Designing a Systematic Protected Area System in Guyana." *Parks* 9 (1999): 7–16.
- Robinson, H. "Two New Species of *Lepidaploa* (Vernonieae: Asteraceae)." *Phytologia* 84(1) (1998): 40–42.
- . "A New Species of *Wedelia* from Ecuador (Heliantheae: Asteraceae)." *Phytologia* 84(5) (1998): 345–346.
- . "New Species and New Combinations of Neotropical Eupatorieae (Asteraceae)." *Phytologia* 84(5) (1998): 347–353.
- . "Two New Subtribes, Stokesiinae and Pacourininae, of the Vernonieae (Asteraceae)." *Proc. Biol. Soc. Wash.* 112(1) (1999): 216–219.
- . "Revisions in Paleotropical Vernonieae (Asteraceae)." *Proc. Biol. Soc. Wash.* 112(1) (1999): 220–247.
- . "Generic and Subtribal Classification of American Vernonieae." *Smithson. Contrib. Bot.* 89 (1999): i–iv, 1–116.
- . "Asteraceae (Eupatorieae, Heliantheae, Liabeae, Vernonieae) in *Catalogue of the Vascular Plants of Ecuador*." P.M. Jørgensen and S. León-Yáñez (eds.). *Monogr. Syst. Bot. Missouri Bot. Gard.* 75 (1999): 261–314.
- Robinson, H. and D. C. Taylor. "A Rejection of *Pepinia* (Bromeliaceae: Pitcairnioideae) and Taxonomic Revisions." *Harvard Papers in Botany* 4(1) (1999): 203–217.
- Robinson, H. and D. C. Taylor. "The Status of the Pitcairnioid Genera of the Bromeliaceae." *Harvard Papers in Botany* 4(1) (1999): 195–201.
- Skog, L. E. (compiler). "Gesneriaceae." Jørgensen, P. M. and Susana Leon-Yanez (eds). *Catalogue of the Vascular Plants of Ecuador. Monographs in Systematic Botany from the Missouri Botanical Garden* 75 (1999): 492–507.
- Smith, J. F., Q. C. B. Cronk, M. Kiehn, and W. L. Wagner. "Adaptive Radiation and Phylogeny of Pacific *Cyrtandra* (Gesneriaceae) Based on Molecular and Morphological Data" (abstract). *XVI International Botanical Congress—Abstracts* 33 (1999).
- Soltis, D.E., M.E. Mort, P.S. Soltis, C. Hibsich-Jetter, E. A. Zimmer and D. Morgan. "Phylogenetic Relationships of the Enigmatic Angiosperm Family Podostemaceae Inferred from 18S rDNA + rbcL Sequence Data." *Mol. Phylog. Evol.* 11 (1999): 261–272.
- Strong, M. T. "*Schoenus lymansmithii* (Cyperaceae), a New Species of *Schoenus* Section *Helothrix* (Nees) Kükenthal from Santa Catarina, Brazil." *Harvard Papers in Botany* 4(1) (1999): 275–277.
- Strong, M. T. and R. Kral. "Proposal to Conserve the Name *Scirpus miliaceus* (Cyperaceae) with a Conserved Type." *Taxon* 48 (1999): 387–389.
- Tangerini, A. R., ed. "I Go To Washington and Meet Dr. Smith." *Harvard Papers in Botany* 4(1) (1999): 97–102.
- Terrell, E.E., J.L. Reveal, R.W. Spjut, R.F. Witcomb, J.H. Kirkbride, Jr., M.T. Cimino, and M.T. Strong. "Annotated List of the Flora of the Beltsville Agricultural Research Center, Beltsville, Maryland." Washington, D.C.: U.S. Department of Agriculture, Agricultural Research Service, ARS-155, 2000.
- Wagner, W. L. "A New Species of Hawaiian *Phyllostegia* (Lamiaceae) from Kaua'i, and Recognition of a Wai'anae Mountain, O'ahu Endangered Variety of *Phyllostegia parviflora*." *Novon* 9 (1999): 280–283.
- . "*Gaura*." K. Iwatsuki, D. E. Boufford, H. Ohba (eds.). *Flora of Japan, Volume II: Angiospermae, Dicotyledoneae, Archichlamydeae (c)*. Tokyo: Kodansha Ltd., 1999, 240.
- . "*Oenothera*." K. Iwatsuki, D. E. Boufford, H. Ohba (eds.). *Flora of Japan, Volume II: Angiospermae, Dicotyledoneae, Archichlamydeae (c)*. Tokyo: Kodansha Ltd., 1999, 235–240.
- . "Diversity and Origin of the Hawaiian Flora" (abstract). *XVI International Botanical Congress—Abstracts* 8 (1999).
- . "Nomenclator and Review of Hawaiian *Phyllostegia* (Lamiaceae)." *Novon* 9 (1999): 265–279.
- Wagner, W. L., M. Brueggemann, D. R. Herbst, J. Q. Lau. "Hawaiian Vascular Plants at Risk: 1999." *Bishop Mus. Occas. Pap.* 60 (1999): 1–64.
- Wagner, W. L., R. A. Fletcher, and R. K. Shannon. "Another Look at *Hymenoxys* Subgenus *Plummera* (Asteraceae: Heliantheae: Gaillardiiinae) from Arizona and New Mexico." *Brittonia* 51 (1999): 79–86.
- Wagner, W. L., D. R. Herbst, and S. H. Sohmer. *Manual of the Flowering Plants of Hawai'i, Revised Edition*. Honolulu: University of Hawaii Press, 1999, 1855–1919.
- Wagner, W. L. and R. K. Shannon. "Nomenclator of Hawaiian *Sicyos* (Cucurbitaceae)." *Novon* 9 (1999): 441–447.
- Wagner, W. L. and S. G. Weller. "Rediscovery and Assessment of *Stenogyne sberffii* Degener (Lamiaceae)." *Novon* 9 (1999): 448–449.



- Wagner, W. L., S. G. Weller, A. K. Sakai, A. C. Medeiros. "An Autogamous Rain Forest Species of *Schiedea* (Caryophyllaceae) from East Maui, Hawaiian Islands." *Novon* 9 (1999): 284–287.
- Wagstaff, D. J., D. B. Lellinger and J. H. Wiersma. "Retrospective Searching for Poisonous Plant Vouchers." *Veterinary and Human Toxicology* 41 (1999): 158–161.
- Wagstaff, D. J., J. H. Wiersma and D. B. Lellinger. "Poisonous Plant Vouchers." *Veterinary and Human Toxicology* 51 (1999): 162–164.
- Weakley, A. S. and P. M. Peterson. "Taxonomy of the *Sporobolus floridanus* Complex (Poaceae: Sporobolinae)." *Sida* 18 (1998): 247–270.
- ### Department of Entomology
- Alarie, Y., P.J. Spangler, and P.D. Perkins. "Study of the Larvae of *Hydrotrupes Palpalis* Sharp (Coleoptera: Adepaga, Dytiscidae) with Implications for the Phylogeny of the Colymbetinae." *The Coleopterists Bulletin* 52(4) (1998): 313–332.
- Aluja, M. and A. L. Norrbom. *Fruit Flies (Tephritidae): Phylogeny and Evolution of Behavior*. Boca Raton: CRC Press, 1999.
- Brown, J. W. "*Dimorphopalpa*, a New Genus of Tortricid Moths from the New World Tropics (Lepidoptera: Tortricidae)." *Pan-Pacific Entomological* 75 (1999): 82–93.
- . "A New Species of *Pseudocomotis* from Costa Rica (Lepidoptera: Tortricidae: Chlidanotinae), with the Description of the First Recorded Female." *Tropical Lepidoptera* 9 (1999): 55–57.
- . "A New *euliine* Genus from Costa Rica and Venezuela (Lepidoptera: Tortricidae)." *Journal of the New York Entomological Society* 106 (1999): 177–184.
- . "Book review: *Oecophorine* Genera of Australia. Part II. The *Chezala*, *Philobota* and *Eulechria* Groups (Lepidoptera: Oecophoridae)." *Journal of the Lepidopterists' Society* 52 (1999): 386–387.
- . "Book review: Invertebrate Surveys for Conservation by T. R. New." *American Entomologist* 45 (1999): 187.
- Brown, J. W. and S. E. Miller. "A New Species of *Coelostathma* (Lepidoptera: Tortricidae) From Cocos Islands, Costa Rica, with Comments on the Phylogenetic Significance of Avdominal Dorsal Pits in *Sparganothini*." *Proceedings of the Entomological Society of Washington*, 101 (1999): 701–707.
- Burns, J. M. "*Pseudodrephalys*: A New Genus Comprising Three Showy, Neotropical Species (One New) Removed From—And Quite Remote From—*Drephalys* (Hesperiidae: Pyrginae)." *Journal of the Lepidopterists' Society*, 52(4) (1998): 364–380.
- Carroll, L. E., A. L. Norrbom, F.C. Thompson, and N. L. Evenhuis. "Bibliography." F. C. Thompson, ed. *Fruit Fly Expert Identification System and Systematic Information Database. Myia 9, vii and Diptera Data Dissemination Disk (CD-ROM)* 9 (1998) 301–513.
- Carroll, L. E., I. M. White, A. Friedberg, and A. L. Norrbom. "Fruit Fly Adult Character Data Matrices. 213 Characters for 60 (Small) or 193 (Large) Taxa in DELTA Format." F. C. Thompson, ed. *Fruit Fly Expert Identification System and Systematic Information Database. Diptera Data Dissemination Disk (CD-ROM) \Fruitfly\Fruitfly.dat & \fruitfl2.dat.1* (1998).
- Condon, M. A. and A. L. Norrbom. "Behavior of Flies in the Genus *Blepharoneura* (Blepharoneurinae)." Aluja, M. and A.L. Norrbom, eds. *Fruit Flies (Tephritidae): Phylogeny and Evolution of Behavior*. Boca Raton: CRC Press, 1999, 157–174.
- Costa, L. A. A. and T. J. Henry. "*Platytyctisca bergmannae*, a New Genus and Species of Neotropical Plant Bug Resembling Species of *Platytyctis* Reuter (Heteroptera: Miridae: Phyllinae)." *Proceedings of the Entomological Society of Washington* 101 (1999): 490–495.
- Davis, D. R. "Ochsenheimeriidae." *Lepidopterorum Catalogus* 5(48) (1998): 1–12.
- . "Neopseustidae." *Lepidopterorum Catalogus* 1(7) (1998): 1–8.
- Diaz-Fleischer, F., D. R. Papaj, R. J. Prokopy, A. L. Norrbom, and M. Aluja. "Evolution of Fruit Fly Oviposition Behavior." Aluja, M. and A.L. Norrbom, eds. *Fruit Flies (Tephritidae): Phylogeny and Evolution of Behavior*. Boca Raton: CRC Press, 1999, 811–841.
- Erwin, T. L. and D. H. Kavanaugh. "Studies of the Subtribe Tachyina (Coleoptera: Carabidae: Bembidiini), Supplement D: Description of a Male of *Costitachys Inusitatus* Erwin, with Notes on Distribution of this Species." *The Coleopterists Bulletin*, 53(1) (1999): 52–55.
- Erwin, T. L. "Evolution at the Equator: Arboreal and Alticolous Beetles and their Taxon Pulses with Descriptions of a New *Agra* Subclade and its Species (Coleoptera: Carabidae: Lebiini)." *Proceedings of a Symposium (28 August, 1996, Florence, Italy) XX International Congress of Entomology* (1998): 491–510.
- Foster, G. A., and W. N. Mathis. "A Revision of the Family Tethinidae (Diptera) from the Caribbean, Gulf of Mexico, and Bermuda." *Proceedings of the Entomological Society of Washington* 100(4) (1998): 601–632.
- Freidberg, A. and A. L. Norrbom. "A Generic Reclassification and Phylogeny of the Tribe Myopitini (Tephritinae)." Aluja M. and A.L. Norrbom, eds. *Fruit Flies (Tephritidae): Phylogeny and Evolution of Behavior*. Boca Raton: CRC Press, 1999, 581–627.
- Froeschner, R. C. "Obituary: Nicholas A. Kormilev, 1901–1998." *Proceedings of the Entomological Society of Washington* 100(4) (1998): 838.
- . "Two Corrections: Aradidae, Tingidae (Heteroptera)." *Entomological News* 109(5) (1998): 343.
- . "True Bugs (Heteroptera) of Panama: A Synoptic Catalog as a Contribution to the Study of Panamanian Biodiversity." *Memoirs of the American Entomological Institute* 61 (1999): 1–393.
- Gagné, R. J. "Book Review: Revision der "Lestremiinae" (Diptera, Cecidomyiidae) der Holarktis by Mathias Jaschhof." *Proceedings of the Entomological Society of Washington* 101 (1999): 462–463.



- . "A Type Species Designation for *Actilasioptera* Gagné (Diptera: Cecidomyiidae)." *Proceedings of the Entomological Society of Washington* 101 (1999): 697.
- . "Obituary: Alan Stone." *Proceedings of the Entomological Society of Washington* 101 (1999): 911-913.
- . "Book Review: Contributions to a Manual of Palaearctic Diptera (with Special Reference to Flies of Economic Importance), Vol. 2, Nematocera and Lower Brachycera." *Proceedings of the Entomological Society of Washington* 100 (1999): 831-833.
- Gagné, R. J. and J. F. Doane. "The Larval Instars of the Wheat Midge, *Sitodiplosis mosellana* (Diptera: Cecidomyiidae)." *Proceedings of the Entomological Society of Washington* 100 (1999): 57-63.
- Gagné, R. J. and L. L. Law. "*Actilasioptera* (Diptera: Cecidomyiidae), a New Genus for Australasian and Asian Gall Midges of Grey Mangroves, *Avicennia* spp. (Avicenniaceae)." Csóka, G., W. J. Mattson, G. N. Stone, and P. W. Price, eds. *The Biology of Gall-Inducing Arthropods*. U.S. Department of Agriculture Forest Service General Technical Report NC-199 (1999): 22-35.
- Gagné, R. J. and J. T. Lill. "A New Nearctic Species of *Lestodiplosis* (Diptera: Cecidomyiidae) Preying on an Oak Leaf Tier, *Psilocorsis quercicella* (Lepidoptera: Oecophoridae)." *Proceedings of the Entomological Society of Washington* 101 (1999): 332-336.
- Gagné, R. J. and E. G. Riley. "A New Gall Midge (Diptera: Cecidomyiidae) Pest of Live Oak in Texas." *Southwestern Entomologist* 24 (1999): 159-165.
- Goldarazena, A., R. Ochoa, and R. Jordana. "Revision of the Genus *Paradactylidium* Mahunka (Acari: Acarophenacidae)." *International Journal of Acarology* 25(2) (1999): 91-99.
- Grissell, E. E. and S. L. Heydon. "The Identity of Two Unplaced New World Megastigminae." *Proceedings of the Entomological Society of Washington* 101(3) (1999): 611-613.
- . "An Annotated Catalog of World Megastigminae." *American Entomological Inst.* 31(4) (1999): 1-92.
- Griswold, C. E., J. A. Coddington, N. I. Platnick, and R. R. Forster. "Towards a Phylogeny of Entelegyne Spiders (Araneae, Araneomorphae, Entelegynae)." *The Journal of Arachnology* 27 (1999): 53-63.
- Henry, T. J. "Review of the Eastern North American Dicyphus, with a Key to Species and Redescription and Neotype Designation for *D. vestitus* Uhler (Heteroptera: Miridae)." *Proceedings of the Entomological Society Washington* 101 (1999): 832-838.
- . "The Spider Commensal Plant Bug Genus *Ranzovius* (Heteroptera: Miridae: Phyllinae) Revisited: Three New Species and a Revised Key, with the Description of a New Sister Genus and Phylogenetic Analysis." *Acta Societas Zoologicae Bohemicae* 63 (1999): 93-115.
- Henry, T. J. and D. Adamski. "*Rhyparochromus saturnius* (Rossi) (Heteroptera: Lygaeoidea: Rhyparochromidae), a Palearctic Seed Bug Newly Discovered in North America." *Journal of the New York Entomological Society* 106 (1999): 132-140.
- Hernandez, L. and T. J. Henry. "Review of the *Ceratocapsus* of Cuba, with Descriptions of Three New Species and a Neotype Designation of *C. cubanus* (Heteroptera: Miridae: Orthotylinae)." *Caribbean Journal of Science* 35 (1999): 201-214.
- Janzen, D. H., M. J. Sharkey, and J. M. Burns. "Parasitization Biology of a New Species of Braconidae (Hymenoptera) Feeding on the Larvae of Costa Rican Dry Forest Skippers (Lepidoptera: Hesperidae: Pyrginae)." *Tropical Lepidoptera* 9 (Suppl. 2) (1998): 33-41.
- Jensen, A. S. and M. B. Stoetzel. "An Examination Of The North American Aphid Species Currently Placed In *Ovatus* Van Der Goot (Hemiptera: Aphididae) With The Description Of A New Genus." *Proceedings of the Entomological Society Washington* 101(1) (1999): 39-56.
- Jianghua Sun, G. L. DeBarr, C. W. Berisford, and M. E. Schauff. "Description Of A New Primary Parasitoid, *Zarhopalus debarri* Sun Sp. Nov (Hymenoptera: Encyrtidae), Of The Loblolly Pine Mealybug, *Oracella acuta* (Lobdell) (Homoptera:Pseudococcidae)." *Canadian Entomologist* 130 (1999): 793-797.
- Krombein, K. V., B. B. Norden, M. M. Rickson, and F. R. Rickson. "Biodiversity of Domatia Occupants (Ants, Wasps, Bees, and Others) of the Sri Lankan Myrmecophyte *Humboldtia laurifolia* Vahl (Fabaceae)." *Smithsonian Contributions to Zoology* 603 (1999): 1-34.
- Krombein, K. V. "Taxonomic Notes on *Eusaphyga* (Hymenoptera: Sapygidae) and Description of *Eusapyga Nordenae* N. SP." *Entomological News* 110(2) (1999): 89-91.
- . "*Brachystegus decoratus* (Turner) (Hymenoptera: Sphecidae), an Indian Wasp New to Sri Lanka." *Proceedings of the Entomological Society of Washington* 100(4) (1998): 828.
- Krombein, K. V. and A. S. Lelej. "Biosystematic Studies of Ceylonese Wasps, XXII: *Bethsmyrmilla*, A New Genus of Mutillid Wasps (Hymenoptera: Mutillidae: Myrmillinae)." *Proceedings of the Entomological Society of Washington* 101(1) (1999): 143-148.
- Legaspi, J. C., J. V. French, M. E. Schauff, and J. B. Woolley. "The Citrus Leafminer *Phyllocnistis citrella* in South Texas: Incidence and Parasitism." *Florida Entomologist* 82 (2) (1999): 1-10.
- Lingafelter, S. W. "Redescription of *Linsleyonides Skiles* (Coptera: Cerabycidae) and Inclusion of *Elaphidion portoricensis* Fisher." *University of Kansas Natural History Museum Special Publication (Entomological Contributions in Memory of Byron A. Alexander)* 24 (1999): 17-20.
- Manguin, S., R. C. Wilkerson, J. E. Conn, Y. Rubio-Palis, J. A. Danoff-Burg, and D. R. Roberts. "Population Structure Of The Primary Malaria Vector In South America, *Anopheles darlingi*, Using Isozyme Random Amplified Polymorphic DNA, Internal Transcribed Spacer2, and Morphologic Markers." *Am. J. Trop. Med. Hyg.* 60 (1999): 364-376.
- Masunagi, K., T. Saigusa, and N. E. Woodley. "Remarkable Disjunct Introductions of *Conchopus borealis* Takagi to the New World (Diptera: Dolichopodidae)." *Entomological Science* 2 (1999): 399-404.

- Mathis, W. N. "A Review of the Beach-Fly Genus *Isocance* Mathis (Diptera: Canacidae)." *Proceedings of the Entomological Society of Washington* 101(2) (1999): 347-358.
- McPheron, B. A., H. Y. Han, J. G. Silva, and A. L. Norrbom. "Phylogeny of the Genera *Anastrepha* and *Toxotrypana* (Trypetinae: Toxotrypanini) Based upon 16S rRNA Mitochondrial DNA Sequences." Aluja, M. and A. L. Norrbom, eds. *Fruit Flies (Tephritidae): Phylogeny and Evolution of Behavior*. Boca Raton: CRC Press, 1999, 343-361.
- Miller, D. R. "*Pseudococcus elisae* and *Pseudococcus jackbeardsleyi*: A Compendium of Agricultural Pests." *CABI Crop Protection Compendium*, Database, 1999.
- Miller, D. R. and M. E. Gimpel. "New Combinations in the *Eriococcidae* and New Homonymy and Synonymy in the *Cerococcidae*." *Proceedings of the Entomological Society of Washington* 101 (1999): 212-218.
- Mueller, U. G., S. A. Rehner, and T. A. Schultz. "The Evolution of Agriculture in Ants." *Science* 281 (1998): 2034-2038.
- Munroe, E. and M. A. Solis. "Pyraloidea." Kristensen, N., ed. *Lepidoptera, Moths and Butterflies, Volume 1, Arthropoda, Insect*. Volume 4, Part 35. *Handbook of Zoology*. Berlin: Walter de Gruyter & Co., 1999, 233-256.
- Nakahara, S. "Validation of *Neohydatotrips samayunkur* (Thysanoptera: Thripidae) for a Thrips Damaging Marigolds (*Tagetes* spp.)." *Proceedings of the Entomological Society of Washington* 101(2) (1999): 458-459.
- Nakahara, S. and R. C. Monteiro. "*Frankliniella zucchini* (Thysanoptera: Thripidae), a New Species and Vector of *Tospovirus* in Brazil." *Proceedings of the Entomological Society of Washington* 101(2) (1999): 290-294.
- Nakahara, S. and G. Vierbergen. "Second Instar Larvae of *Frankliniella* Species in Europe." *Proceedings of Sixth International Symposium on Thysanoptera* (1999): 113-120.
- Nieser, N. and D. A. Polhemus. "Four New Species of *Rhagovelia* (Heteroptera: Veliidae) from Minas Gerais (Brazil), with a Key to the Regional Species of the *angustipes* Complex." *Aquatic Insects* 21(1) (1999): 53-76.
- Norrbom, A. L., L. E. Carroll, F. C. Thompson, I. M. White, and A. Freidberg. "Systematic Database of Names." F. C. Thompson, ed. *Fruit Fly Expert Identification System and Systematic Information Database*. *Myia* 9, vii and Diptera Data Dissemination Disk (CD-ROM) 9 (1998): 65-251.
- Norrbom, A. L., R. A. Zucchi, and V. Hernandez-Ortiz. "Phylogeny of the genera *Anastrepha* and *Toxotrypana* (Trypetinae: Toxotrypanini) based on morphology." Aluja, M. and A. L. Norrbom, eds. *Fruit Flies (Tephritidae): Phylogeny and Evolution of Behavior*. Boca Raton: CRC Press, 1999, 299-342.
- Norrbom, A. L., L. E. Carroll, and A. Freidberg. "Status of Knowledge." pp. 9-47. F. C. Thompson, ed. *Fruit Fly Expert Identification System and Systematic Information Database*. *Myia* 9, vii and Diptera Data Dissemination Disk (CD-ROM) 9 (1998):9-47.
- Norrbom, A. L. and M. A. Condon. "Phylogeny of the Subfamily Blepharoneurinae." Aluja, M. and A. L. Norrbom, eds. *Fruit flies (Tephritidae): Phylogeny and Evolution of Behavior*. Boca Raton: CRC Press, 1999, 135-155.
- Ochoa, R. "A 'Mite' More Information." *Science* 286 (December 24, 1999): 2451-2452.
- Peyton, E. L., S. R. Campbell, T. M. Candeletti, M. Romanowski, and W. J. Crans. "*Aedes (Finlaya) japonicus japonicus* (Theobald), a New Introduction into the United States." *J. Am. Mosq. Control Assoc.* 15 (1999): 238-241.
- Peyton E. L., J. E. Pecor, T. V. Gaffigan, M. Trpis, L. M. Rueda, and R. C. Wilkerson. "The Johns Hopkins University School of Hygiene and Public Health, Lloyd E. Rozeboom Mosquito Collection." *J. Am. Mosq. Control Assoc.* 15 (1999): 526-551.
- Pogue, M. G. "Assessing Biodiversity in Lepidoptera Using Examples from the Neotropics." *Journal of the Lepidopterists' Society* 53: 65-71.
- . "Spodoptera Larval Plant Hosts, Parasitoids, Predator. and Bibliographic Databases." (To be included on a CD to accompany the world revision of Spodoptera publication.) *Systematic Entomology Laboratory Website* (1999).
- Pogue, M. G. and A. Aiello. "Description of the Immature Stages of Three Species of *Eulepidotis* Guenee (Lepidoptera: Noctuidae) with Notes on Their Natural History." *Proceedings of the Entomological Society of Washington* 101 (1999): 300-311.
- Reinert, J. F. "Restoration of *Verrallina* to Generic Rank in Tribe Aedini (Diptera: Culicidae) and Descriptions of the Genus and Three Included Subgenera." *Contrib. Am. Entomol. Inst.* 31(3) (1999): 1-383.
- Robbins, R. K. and S. S. Nicolay. "Taxonomy of *Strymon Toussainti*, *S. Andrewi*, *S. Amonensis*, and *S. Rhaptos* (Lycaenidae: Theclinae)." *Journal of the Lepidopterists' Society* 52(3) (1998): 328-334.
- . "Taxonomy and Nomenclature of *Strymon Istapa* and *S. Columella* (Lycaenidae: Theclinae: Eumaeini)." *Journal of the Lepidopterists' Society* 52(3) (1998): 318-327.
- Schauff, M. E. "New Record of a Parasitoid (Hymenoptera: Eulophidae) of the European Corn Borer, *Ostrinia nubilalis* (Hübner) (Lepidoptera: Crambidae)." *Proceedings of the Entomological Society of Washington* 101 (1999): 910.
- Scheffer, S. J. "Use of Sugar Beet Foliage by the Introduced Leafmining Fly *Amauromyza flavifrons* (Diptera: Argromyzidae)." *Journal of Economic Entomology* 92 (1999): 347-350.
- . "Genetic Variation and the Potential for Host Range Evolution in the Leafmining Fly *Amauromyza flavifrons* (Diptera: Argromyzidae)." *Annals of the Entomological Society of America* 92 (1999): 742-747.
- Schultz, T. R., D. Bekkevold, and J. J. Boomsma. "*Acromyrmex insinuator* new species: An Incipient Social Parasite of Fungus-Growing Ants." *Insectes Sociaux* 45 (1998): 457-471.
- Schultz, T. R., G. A. Churchill. "The Role of Subjectivity in Reconstructing Ancestral Character States: A Bayesian Approach to Unknown Rates, States, and Transformation Asymmetries." *Systematic Biology* 48(3) (1999): 651-664.

- Smith, D. R. "Identity of *Syrista speciosa* Mocsary and Notes on the Genus *Urosyrista* Maa (Hymenoptera: Cephidae)." *Proceedings of the Entomological Society of Washington* 101(2) (1999): 285–289.
- . "Sawfly Literature Database." Systematic Entomology Laboratory Web site; <http://198.77.175.60:59/entomology/sawflies/search.html> (1999).
- Smith, D. R. and M. A. Beeche. "Notes on Chilean Orussidae (Hymenoptera) and a Probable New Host Association." *Proceedings of the Entomological Society of Washington* 101 (1999): 697–698.
- Solis, M. A. "*Nymphulinae* Duponchel [1845] (Insecta: Lepidoptera): Proposed Precedence over *Acentropinae* Stephens, 1836. Case 3048." *Bulletin of the International Commission on Zoological Nomenclature* 56(1) (1999): 31–33.
- . "Key to Frequently Intercepted Pyraloidea (Lepidoptera) Larvae: Revision of Pyraloidea in "Keys to Some Frequently Intercepted Lepidopterous Larvae" (Weisman 1986)." *Proceedings of the Entomological Society of Washington* 101 (1999): 645–686.
- . "Insect Biodiversity: Perspectives from the Systematist." *American Entomologist* 45(4) (1999): 204–205.
- Solis, M. A. and M. Shaffer. "Contribution Towards the Study of the Pyralinae (Pyralidae): Historical Review, Morphology, and Nomenclature." *Journal of the Lepidopterists' Society* 53(1) (1999): 1–10.
- Solis, M. A. and M. G. Pogue. "Lepidopteran Biodiversity: Patterns and Estimators." *American Entomologist* 45 (1999): 206–212.
- Spangler, P. J. "A New Tribe, Genus and Species of Limnichid Beetle, *Wooldridgeus perforatus*, from Malaysia (Coleoptera: Limnichidae: Wooldridgeini)." *Insecta Mundi* 12 (3–4) (1998): 181–188.
- Stoetzel, M. B. and G. L. Miller. "Notes on *Macrosiphoniella leucanthemi* (Ferrari) (Homoptera: Aphididae)." *Entomological News* 110(1) (1999): 45–50.
- Stoetzel, M. B., A. S. Jensen, and G. L. Miller. "Reevaluation of the Genus *Hyalomyzus* Richards with the Description of Two New Species (Homoptera: Aphididae)." *Annals of the Entomological Society America* 92(4) (1999): 488–513.
- Teulon, D. A. J., E. A. Cameron, and S. Nakahara. "Thrips (Thysanoptera) Biodiversity in a Sugar Maple Plantation in Pennsylvania." *Canadian Entomologist* 131 (1999): 629–633.
- Thompson, F. C. "Postscript [to Family-group Names in Diptera]." *Myia* 10 (1999): 575–576.
- . "Data Dictionary and Standards for Fruit Fly Information Database." *Myia* 9 (1999): 49–63.
- . "A New Oriental *Sphagina* Species (Diptera: Syrphidae)." *Entomological News* 110 (1999): 206–208.
- Thompson, F. C., N. L. Evenhuis, and C. W. Sabrosky. "Bibliography [of Family-group Names in Diptera]." *Myia* 10 (1999): 364–574.
- White, I. M., A. L. Norrbom, D. H. Headrick, and L. E. Carroll. "Glossary." Aluja, M. and A. L. Norrbom, eds. *Fruit flies (Tephritidae): Phylogeny and Evolution of Behavior*. Boca Raton: CRC Press, 1999, 881–924.
- Williams, D. J. and D. R. Miller. "Two New Genera and Species of Mealybugs (Hemiptera: Coccoidea: Pseudococcidae) that Produce Plant Galls." *Proceedings of the Entomological Society of Washington* 101 (1999): 522–539.
- Woodley, N. E. "Book review: Mason, Franco. 1997. The Afrotropical Nematelinae (Diptera, Stratiomyidae). Monografie XXIV. Museo Regionale di Scienze Naturali, Torino, Italy." *Annals of the Entomological Society of America* 92 (1999): 456.
- . "Book Review: MONOGRAFIA XXIV, THE AFROTROPICAL NEMOTELINAE (DIPTERA: STRATIOMYIDAE). By Franco Mason. Museo Regionale di Scienze Naturali, Torino, Italy, 1997." *Systematic Entomology* 24 (1999): 101–102.
- . "Systematics and Biodiversity: Examples from Dipterology." *American Entomologist* 45 (1999): 223–227.
- . "Lectotype Designations in Xylomyidae and Stratiomyidae (Diptera)." *Entomological News* (1999).
- Zinovjev, A. G. and D. R. Smith. "Types and Biological Notes of the Eastern North American Sawflies of *Pontania* Costa and *Phyllocolpa* Benson (Hymenoptera: Tenthredinidae) Described by Marlatt, Dyar, and Rohwer." *Proceedings of the Entomological Society of Washington* 101(2) (1999): 359–371.

### Department of Invertebrate Zoology

- Ambler, J. W., F. D. Ferrari, J. A. Fornshell and E. J. Buskey. "Diel Cycles of Molting, Mating, Egg Sac Production and Hatching in the Swarm Forming Cyclopoid Copepod *Dioithona oculata*." *Plankton Biology and Ecology* 46(2) (1999): 120–127.
- Barnard, J. L. "Revision of Laphystiopsidae (Crustacea: Amphipoda): New and Old Species from South China Sea, Southeastern Australia, Falkland Islands and Western Atlantic Ocean." *Memoirs of the Museum of Victoria* 57(2) (1999): 287–310.
- Blanco Rambla, J. P. and R. Lemaitre. "*Neocallichirus raymanni*, a New Species of Ghost Shrimp from the Northeastern Coast of Venezuela (Crustacea: Decapoda: Callianassidae)." *Proceedings of the Biological Society of Washington* 112(4) (1999): 768–777.
- Bolstad, K. S. and B. Kensley. "Two New Species of *Hansenium* (Crustacea: Isopoda: Asellota) from Madang, Papua New Guinea." *Proceedings of the Biological Society of Washington* 112(1) (1999): 164–174.
- Cairns, S. D. Ch. 6. "Stratigraphic Distribution of Neogene Caribbean Azooxanthellate Corals (Scleractinia and Stylasteridae)." *Bulletins of American Paleontology* 357 (1999): 109–118.
- . "Cnidaria Anthozoa: Deep-water Azooxanthellate Scleractinia from Vanuatu, and Wallis and Futuna Islands." *Resultats des Campagnes MUSORSTOM*, 20. *Memoires du Museum National d'Histoire Naturelle* 180 (1999): 31–167.
- . "Species Richness of Recent Scleractinia." *Atoll Research Bulletin* 459 (1999): 1–12.

- Cairns, S. D., B. W. Hoeksema and J. van der Land. "Appendix: List of Extant Stony Corals." *Atoll Research Bulletin* 459 (1999): 13–46.
- Campos, M. R. and R. Lemaitre. "Two New Freshwater Crabs of the Genus *Ptychopballus* Smalley, 1964 (Crustacea: Decapoda: Brachyura: Pseudothelphusidae) from Panama, with Notes on the Distribution of the Genus." *Proceedings of the Biological Society of Washington* 112(3) (1999): 553–561.
- Cappola, V. A. and R. B. Manning. "Relationships within the Stomatopod Genus *Eurysquilla*." *Proceedings of the Fourth International Crustacean Congress, 1998* (1999): 383–393.
- Clarke, M. R. and C. F. E. Roper. "Cephalopods Represented by Beaks in the Stomach of a Sperm Whale Stranded at Paekakarike, North Island, New Zealand." *South African Journal of Marine Science* 20 (1999): 129–134.
- Erdmann, M. V. and R. B. Manning. "A New Species of *Siamosquilla* from Indonesia (Crustacea: Stomatopoda: Protosquillidae)." *Proceedings of the Biological Society of Washington* 112(1) (1999): 94–96.
- Gibbons, M. J., et al., 30+ authors, incl. Kensley, Kornicker, Manning. "The Taxonomic Richness of South Africa's Marine Fauna: A Crisis at Hand." *South African Journal of Science* 95 (1999): 8–11.
- Harasewych, M. G. and Y. I. Kantor. "A Revision of the Antarctic Genus *Cblanidota* (Gastropoda: Neogastropoda: Buccinulidae)." *Proceedings of the Biological Society of Washington* 112(2) (1999): 253–302.
- Hope, W. D. and A. V. Tschesunov. "*Smithsoninema inaequale* n.g. and n.sp. (Nematoda, Leptolaimidae) Inhabiting the Test of a Foraminiferan." *Invertebrate Biology* 118(2) (1999): 95–108.
- Kantor, Y. I. and M. G. Harasewych. "Rediscovery of the Antarctic Species *Sipho gaini* Lamy, 1910 (Gastropoda: Neogastropoda) with Remarks on its Taxonomic Position." *Antarctic Research* 11(4) (1999): 431–436.
- Kensley, B. and M. Schotte. "New Records of Isopods from the Indian River Lagoon, Florida (Crustacea: Peracarida)." *Proceedings of the Biological Society of Washington* 112(4) (1999): 695–713.
- Kito, K. and W. D. Hope. "*Leptosomatides brevicaudatus* n.sp. and a Redescription of *Leptosomatides marinae* Platonova, 1967 (Enoplida: Leptosomatidae)." *Journal of Nematology* 31(4) (1999): 460–474.
- Kornicker, L. S. and E. Harrison-Nelson. "Eumeli Expeditions, Part 1: *Tetragonodon rex*, new species, and General Reproductive Biology of the Myodocopina." *Smithsonian Contributions to Zoology* 602 (1999): 1–55.
- Kornicker, L. S. and T. M. Iliffe. "Myodocopoid Ostracoda from Exuma Sound, Bahamas, and from the Marine Caves and Blue Holes in the Bahamas, Bermuda, and Mexico." *Smithsonian Contributions to Zoology* 606 (1999): 1–98.
- Leal, J. H. and M. G. Harasewych. "Deepest Atlantic Molluscs: Hadal Limpets (Mollusca, Gastropoda, Cocculiniformia) from the Northern Boundary of the Caribbean Plate." *Invertebrate Biology* 118(2) (1999): 116–136.
- Lemaitre, R. "Crustacea Decapoda: A review of the Species of the Genus *Parapagurus* Smith, 1879 (Parapaguridae) from the Pacific and Indian Oceans." *Resultats des Campagnes MUSORSTOM, 20. Memoires du Museum National d'Histoire Naturelle* 180 (1999): 303–378.
- Mickevich, M. F. "Scientific Aspects of Biodiversity Databasing." *American Entomologist* 45(4) (1999): 26–32.
- Reid, J. W. "Discover Life in America, Great Smoky Mountains National Park. Crustacean Checklist." <http://www.discoverlife.org/nh/cl/GSMNP/crustaceans.html> (1999).
- . "New Records of *Bryocyclops* from the Continental U.S.A., Puerto Rico, and Brazil (Copepoda: Cyclopoida: Cyclopidae)." *Journal of Crustacean Biology* 19(1) (1999): 84–92.
- . "Técnicas Taxonomicas para Copepodes." *Limnostemas, Sociedade Brasileira de Limnologia* 1 (1999): 1–23.
- Reid, J. W. and E. Suarez-Morales. "A New, Neotropical Species of *Acanthocyclops* (Copepoda: Cyclopoida: Cyclopidae)." *Beaufortia* 49(5) (1999): 37–45.
- Reid, J. W. and L. Moreno D. "The Western and Southern Distribution of *Mesocyclops edax* (S.A. Forbes) (Crustacea: Copepoda: Cyclopoida)." *Proceedings of the Biological Society of Washington* 112(3) (1999): 581–591.
- Reid, J. W., D. L. Strayer, J. V. McArthur, S. E. Stibbe and J. L. Lewis. "*Rheocyclops*, a New Genus of Copepods from the Southeastern and Central U.S.A. (Copepoda: Cyclopoida: Cyclopidae)." *Journal of Crustacean Biology* 19(2) (1999): 384–396.
- Rho, B. J. and L. L. Cole. "*Metandrocarpa kudoii*, a New Colonial Ascidian (Stolidobranchia, Styelidae) from Korea." *Bulletin of Marine Science* 65(1) (1999): 151–157.
- Richardson, S. L. and K. Ruetzler. "Bacterial Endosymbionts in the Agglutinating Foraminiferan *Spiculidendron coralicolum* Ruetzler and Richardson, 1996." *Symbiosis* 26 (1999): 299–312.
- Roe, P. and J. L. Norenburg. "Observations on Depth Distribution, Diversity and Abundance of Pelagic Nemerteans from the Pacific Ocean off California and Hawaii." *Deep-Sea Research Part 1*, 46 (1999): 1201–1220.
- Roux, M. and D. L. Pawson. "Two New Pacific Ocean Species of Hyocrinid Crinoids (Echinodermata), with Comments on Presumed Giant-dwarf Gradients Related to Seamounts and Abyssal Plains." *Pacific Science* 53(3) (1999): 289–298.
- Ruetzler, K., M. Carpenter, K. Smith and M. Robbart. "Smithsonian CCRE Reports 1996–1998. Caribbean Coral Reef Ecosystems." *Smithsonian Institution, Caribbean Coral Reef Ecosystems Program* (1999).
- Staton, J. L. and M. E. Rice. "Genetic Differentiation Despite Teleplanic Larval Dispersal: Allozyme Variation in Sipunculans of the *Apionsoma misakianum* Species-complex." *Bulletin of Marine Science* 65(2) (1999): 467–480.
- Strayer, D. L. and J. W. Reid. "Distribution of Hyporheic Cyclopoids (Crustacea: Copepoda) in the Eastern United States." *Archives Hydrobiologia* 145(1) (1999): 79–92.

- Strong, E. E. and M. G. Harasewych. "The Anatomy of the Hadal Limpet *Macleaniella moskalevi* (Gastropoda: Cocculinioidea)." *Invertebrate Biology* 118(2) (1999): 137-148.
- Suarez-Morales, E., J. McLelland and J. W. Reid. "The Planktonic Copepods of Coastal Saline Ponds of the Cayman Islands with Special Reference to the Occurrence of *Mesocyclops ogunnus* Onabamiro, an Apparently Introduced Afro-Asian cyclopoid." *Gulf Research Reports* 11 (1999): 51-55.
- Sweeney, M. J. and M. G. Harasewych. "Harald A. Rehder (1907-1996): Biographical Sketch and Malacological Contributions." *The Nautilus* 113(4) (1999): 127-150.
- Tudge, C. C. "Ultrastructure of the Spermatophore Lateral Ridge in Hermit Crabs (Decapoda, Anomura, Paguroidea)." *Crustaceana* 72(1) (1999): 77-84.
- Vecchione, M. and R. E. Young. "The Magnapinnidae, a Newly Discovered Family of Oceanic Squids (Cephalopoda; Oegopsida)." *South African Journal of Marine Science* 20 (1999): 429-437.

### Department of Mineral Sciences

- Dreizen, E. L., V. K. Hoffman, and E. P. Vicenzi. "High Temperature Phases in Ternary Zr-O-N Systems." *Journal of Materials Research* 14 (1999): 3840-3842.
- Dreizen, E. L., D. G. Keil, W. Felder, and E. P. Vicenzi. "Phase Changes in Boron Ignition and Combustion." *Combustion and Flame* 119 (1999): 272-290.
- Iizasa, K., R. S. Fiske, M. Ishizuka, M. Yuasa, J. Hashimoto, J. Naka, Y. Horii, Y. Fujiwara, A. Imai, and S. Koyama. "A Kuroko-type Polymetallic Sulfide Deposit in a Submarine Silicic Caldera." *Science* 283 (1999): 975-977.
- Logan, M. A. "Geology of the Gualilán and Gualcamayo gold districts, San Juan, Argentina." Invited chapter. E. Zappettini, ed. *Recursos Minerales de la República Argentina, Instituto de Geología y Recursos Minerales SEGEMAR, Anales* 35 (1999): 1525-1534.
- McCoy, T. J., T. L. Dickinson, and G. E. Lofgren. "Partial Melting of the Indarch (EH4) Meteorite: A Textural, Chemical and Phase Relations View of Melting and Melt Migration." *Meteoritics and Planetary Science* 34 (1999): 735-746.
- McCoy, T. J., M. Wadhwa, and K. Keil. "New Lithologies in the Zagami Meteorite: Evidence for Fractional Crystallization of a Single Magma Unit on Mars." *Geochim. Cosmochim. Acta* 63 (7-8) (1999): 1249-1262.
- Ni, Y., J. E. Post, and J. M. Hughes. "The Crystal Structure of Parisite-(Ce),  $Ce_2CaF_2(CO)_3$ ." *American Mineralogist* 85 (1999): 251-258.
- Post, J. E. "Manganese Oxide Minerals: Crystal Structures and Economic and Environmental Significance." J. V. Smith, ed. *Colloquium on Geology, Mineralogy, and Human Welfare* Washington, D.C.: National Academy of Sciences, 1999, 3447-3454.
- Schalamuk, I. B. and M. A. V. Logan. "Distrito Argentífero Cerro Negro, La Rioja, Argentina."

- Zappettini, E., ed. *Recursos Minerales de la República Argentina, Instituto de Geología y Recursos Minerales SEGEMAR, Anales* 35 (1999): 1665-1671.

### Department of Paleobiology

- Bernasconi, M. P. and D. J. Stanley. "Molluscan Faunas: A Means to Refine Holocene Sea-level Changes Seaward of the Nile Delta." *World Deltas Symposium, Book of Abstracts* (1998): 50.
- Birkenmajer, K. and E. L. Yochelson. "*Ceratopea* (Gastropoda) from Lower Ordovician of South Spitsbergen." *Bulletin Polish Academy of Sciences, Earth Sciences* 46 (1999): 157-165.
- Bohaska, David J. "Fossil Marine Mammals of the Lower Miocene Pollack Farm Site, Delaware." Benson, R. N., ed. *Geology and Paleontology of the Lower Miocene Pollack Farm Fossil Site, Delaware, Delaware Geological Survey Special Publication* 21 (1998): 179-191.
- Brett, C.E., T. E. Whitely, P. A. Allison, and E. L. Yochelson. "The Walcott-Rust Quarry: Middle Ordovician Trilobite Konservat-Lagerstätten." *Journal of Paleontology* 73 (1999): 288-305.
- Case, J. A., J. E. Martin, D. S. Chaney, M. Reguero, and M. O. Woodburne. "The First Hadrosaur from Antarctica." *Society of Vertebrate Paleontology Abstracts of the Fifty-Eighth Annual Meeting* 18 (1998): 32A.
- Chaney, D. S., S. H. Mamay, and W. A. DiMichele. "Mesozoic Elements in an Early Permian Flora from Texas: Implications for the End-Permian Extinction on Land." *Geological Society of America Annual Meeting, Toronto, Abstracts with Programs* 30 (1998): A312.
- Cutler, Alan H. "A Note on the Taphonomy of Lower Miocene Fossil Land Mammals from the Marine Calvert Formation at the Pollack Farm Fossil Site, Delaware." Benson, R. N., ed. *Geology and Paleontology of the Lower Miocene Pollack Farm Fossil Site, Delaware, Delaware Geological Survey Special Publication* 21 (1998): 175-178.
- Cutler, Alan H., A. K. Behrensmeyer, and R. E. Chapman. "Environmental Information in a Recent Bone Assemblage: Roles of Taphonomic Processes and Ecological Change." *Palaeo* 3149 (1999): 359-372.
- Emry, R. J., and Ralph E. Eshelman. "The Early Hemingfordian (Early Miocene) Pollack Farm Local Fauna: First Tertiary Land Mammals Described from Delaware." Benson, R. N., ed. *Geology and Paleontology of the Lower Miocene Pollack Farm Fossil Site, Delaware, Delaware Geological Survey Special Publication* 21 (1998): 153-173.
- Erwin, D. H. "Biospheric Perturbations: From the Neoproterozoic-Cambrian Radiation to the End-Permian Crisis." *Journal of African Earth Sciences* 28 (1999): 5-27.
- . "The Origin of Bodyplans." *American Zoologist* 39(1999): 617-629.
- Glenister, B. F., B. R. Wardlaw, L. L. Lambert, C. Spinosa, S. A. Bowring, D. H. Erwin, M. Menning, and G. L. Wilde. "Proposal of Guadalupian and Component Roadian, Wordian, and Capitanian Stages as International

- Standards for the Middle Permian Series." *Permophiles* 34 (1999): 3-11.
- Goodfriend, G. A. and D. J. Stanley. "Rapid Strand-plain Accretion in the Northeastern Nile Delta in the 9th Century A.D. and the Demise of the Port of Pelusium." *Geology* 27(2) (1999): 147-150.
- Hubbard, David A. and F. Grady. "Mammoth Tooth Found in Endless Caverns, Virginia." *Virginia Minerals* 45(1) (1999).
- Huber, B. T. "Tropical Paradise at the Cretaceous Poles?" *Science* 282 (1998): 2199-2200.
- Isacson, P. E. and J. T. Dutro, Jr. "Lower Carboniferous Brachiopods from Sierra de Almeida, Northern Chile." *Journal Paleontology* 73 (4) (1999): 625-633.
- Jett, J. "Recent Literature on Foraminifera." *J. Foram Res.* 28 (1998): 90-93.
- Koch, P. L. and S. L. Wing. "Climatic and Vegetational Change and the Late Pleistocene Extinction." *Geol. Soc. America Ann. Meeting, Abstract with Programs* (1998): A-38.
- Kontrovitz, M. and D. J. Stanley. "Brackish Water Ostracodes from the Northern Nile Delta, Egypt." *World Deltas Symposium, Book of Abstracts* (1998): 53.
- Labandeira, C. C. and D. Smith. "Forging a Future for Fossil Insects: Thoughts on the First International Congress of Paleontomology." *Paleobiology* 25(2) (1999): 154-157.
- Labandeira, C. C. "The Fossil History and Antecedents of Insect Pollination" (abstract). *Geological Society of America, Abstracts with Programs* 30(7) (1998): 37.
- . "The Paleozoic Origin of Diverse and Significant Insect Herbivory: Rejection of the Expanding Resources Hypothesis" (abstract). *Abstracts of the First International Paleontomological Conference* (1998): 20.
- . "The Fossil History of Spore and Pollen Consumption by Insects: Implications for the Origin of Pollination" (abstract). *Abstracts of the First International Paleontomological Conference* (1998): 20.
- . "Book Review of 'Arthropod Fossils and Phylogeny' by G. A. Edgecombe, ed." *Palaiois* 14(4) (1999): 405-407.
- Lavarov, A. V. and R. J. Emry. "*Hyaenodon venturiae* (Hyaenodontidae, Creodonta, Mammalia) from the Early Chadronian (Latest Eocene) of Wyoming." *Journal of Paleontology* 72(4) (1998): 752-757.
- Loizeau, J.-L. and D. J. Stanley. "Human Impacts on Coastal Mariut Lake and Idku Lagoon (Nile Delta, Egypt) Recorded in Recent Sediments." *World Deltas Symposium, Book of Abstracts* (1998): 49.
- Lucas, Spencer G. and Robert J. Emry. "Taxonomy and Biochronological Significance of Paraentelodon, a Giant Entelodont (Mammalia, Artiodactyla) from the Late Oligocene of Asia." *Journal of Vertebrate Paleontology* 19 (1999): 160-168.
- Mamay, S. H., D. S. Chaney, and W. A. DiMichele. "A Mesozoic-type Flora from the Lower Permian of Texas." *American Journal of Botany Abstracts* 85 (1998): 77.
- McDonald, Jerry N., Ralph E. Eshelman, F. V. Grady, and David A. Hubbard, Jr. "The Late Wisconsinan Mammalian Fauna of Virginia." *The Mammals of Virginia*, 1999, Appendix VI, 331-350.
- Neuman, R. B. "Arenig-early Llanvirn Age Celtic Brachiopod Assemblage Reaffirmed" (abstract). Kraft, P. and O. Fatka, eds. *Quo Vadis Ordovician? Proceedings of the Eighth International Symposium on the Ordovician System, Prague, 20-25 June, 1999; Acta Universitatis Carolinae, Geologica* 43 (1999): 345-346.
- Norris, R. D., B. T. Huber, J. Self-Trail. "Synchronicity of the K-T Oceanic Mass Extinction and Meteorite Impact: Blake Nose, Western North Atlantic." *Geology* 27(5) (May 1999): 419-422.
- Oliver, W. A., Jr. "The Principal Pridolian and Lochkovian Rugose Coral Assemblages or Communities in Eastern North America." Buocot, A. J. and J. D. Lawson, eds. *Paleocommunities*. Cambridge: Cambridge University Press, 1999, 800-805.
- . "On the Origin of 'Spongophylloides' in Eastern North America" (abstract). *Proceedings of Cnidaria VIII, Sendai, Japan, September* (1999).
- Olsson, R. K., C. Hemleben, W. A. Berggren, and B. T. Huber. "Atlas of Paleocene Planktonic Foraminifera." *Smithsonian Contributions to Paleobiology* 85 (1999).
- Palmer, M., C. C. Labandeira, K. Johnson, and W. Wehr. "Diversity and Intensity of Insect Herbivory on the Middle Eocene Republic Flora: Comparing the Fossil Record with the Record" (abstract). *Geological Society of America, Abstracts with Programs* 30(7) (1998): 37.
- Pandolfi, J. M., G. Llewellyn, J. B. C. Jackson. "Interpretation of Ancient Reef Environments in Paleocological Studies of Community Structure: Curaçao, Netherlands Antilles, Caribbean Sea." *Coral Reefs* 18 (1999): 107-122.
- Pandolfi, J. M. "Response of Pleistocene Coral Reefs to Environmental Change over Long Temporal Scales." *American Zoologist* 39 (1999): 113-130.
- Phillips, T. L. and W. A. DiMichele. "Coal Ball Sampling and Quantification." Jones, T. P. and N. P. Rowe, eds. *Fossil Plants and Spores, Modern Techniques*. London: The Geological Society, 1999, 206-209.
- Pojeta, John, Jr. "Cambrian and Ordovician Diasome Mollusks." *Abstracts for the American Malacological Society, 65th Annual Meeting, Pittsburgh, Pennsylvania, U.S.A.* (1999): 47.
- Pribyl, L. J., C. C. Labandeira, and D. Kohls. "Biodiversity and Taphonomy of Fossil Insects from the Green River Formation, Piceance Creek Basin, Colorado, U.S.A." (abstract). *Abstracts of the First International Paleontomological Conference* (1998): 37.
- Purdy, Robert W. "The Early Miocene Fish Fauna from the Pollack Farm Site, Delaware." Benson, R. N., ed. *Geology and Paleontology of the Lower Miocene Pollack Farm Fossil Site, Delaware, Delaware Geological Survey Special Publication* 21 (1998): 133-139.
- Randazzo, G. and D. J. Stanley. "Human-induced Sedimentological Changes in Manzala Lagoon, Nile Delta, Egypt." *World Deltas Symposium, Book of Abstracts* (1998): 52.
- Randazzo, G., D. J. Stanley, S. I. Di Geronimo, and C. Amore. "Human-induced Sedimentological Changes in

- Manzala Lagoon, Nile Delta, Egypt." *Environmental Geology* 36 (1999): 235–258.
- Reinhardt, E. G., D. J. Stanley, and R. T. Patterson. "Strontium Isotopic-Paleontological Method as a High-resolution Paleosalinity Tool for Lagoonal Environments—Evidence from a Nile Delta Lagoon." *World Deltas Symposium, Book of Abstracts* (1998): 51.
- Reinhardt, E. G., D. J. Stanley, and R. T. Patterson. "Strontium Isotopic-Paleontological Method as a High-resolution Paleosalinity Tool for Lagoonal Environments." *Geology* 26 (1998): 1003–1006.
- Sohn, I. G., and F. M. Swain. "On the Superfamily Darwinuloidacea, the Type Species of *Darwinuloidea* Mandelstam, 1956, and the Status of *Cheikella* Sohn and Morris, 1963 (Ostracoda)." *Journal of Paleontology* 73(1) (1999): 159–160.
- Sohn, I. G. "*Suchonella* Spizharsky, 1937 (Crustacea, Ostracoda): *Suchonella typica* Spizharsky, 1938 Designated as the Type Species. Opinion 1915." *Bulletin of Zoological Nomenclature* 56(1) (1999): 8.
- Stanley, D. J. and A. G. Warne. "Nile Delta in its Destruction Phase." *Journal of Coastal Research* 14 (1998): 794–825.
- Stanley, D. J., Z. Chen, and J. Song. "Inundation, Sea-level Rise and Transition from Neolithic to Bronze Age Cultures, Yangtze Delta, China." *Geoarchaeology* 14 (1999): 15–26.
- Stanley, D. J. "Rio Grande Delta in Texas—Sea Level, Climate, Neotectonics, and Anthropogenic Effects." *USGS Sound Waves* 5 (1999): 3–4.
- . "Evaluating Use of Rock-hewn Features for Sea-level Measurement, Israeli Coast." *Journal of Coastal Research* 15(2) (1999): 326–331.
- Valentine, J. W., D. Jablonski, and D. H. Erwin. "Fossils, Molecules and Embryos: New Perspectives on the Cambrian Explosion." *Development* 126 (1999): 851–859.
- Waller, T. R. and G. D. Stanley, Jr. "New Marine Middle Triassic Bivalves from the New Pass Range, West-central Nevada" (abstract). *Geological Society of America Abstracts with Programs* 30(7) (1998).
- Warne, A. G. and D. J. Stanley. "Late Quaternary to Recent History of the Nile Delta in the Alexandria Region, Egypt: Use of Geologic Record to Evaluate Human Impacts." *World Deltas Symposium, Book of Abstracts* (1998): 54.
- Webers, G. F. and E. L. Yochelson. "A Revision of *Palaeacmaea* (Upper Cambrian) (?Cnidaria)." *Journal of Paleontology* 73(4) (1999): 598–607.
- Wilf, P., K. C. Beard, K. S. Davies-Vollum, and J. W. Norejko. "Portrait of a Late Paleocene (Early Clarkforkian) Terrestrial Ecosystem: Big Multi Quarry and Associated Strata, Washakie Basin, Southwestern Wyoming." *Palaios* 13 (1998): 514–532.
- Wilf, P. *Using Fossil Plants to Understand Global Change: Evidence for Paleocene-Eocene Warming in the Greater Green River Basin of Southwestern Wyoming* (doctoral dissertation). Philadelphia: University of Pennsylvania, 1998.
- Wilf, P., K. C. Beard, K. S. Davies-Vollum, and J. W. Norejko. "Portrait of a Late Paleocene (Early Clarkforkian) Terrestrial Ecosystem: Big Multi Quarry and Associated Strata, Washakie Basin, Southwestern Wyoming." *Geological Society of America Annual Meeting, Toronto, Abstracts with Programs* 30 (1998): A38.
- Wilf, P., S. L. Wing, D. R. Greenwood, and C. L. Greenwood. "Using Fossil Leaves as Paleo-rain Gauges—An Eocene Example: Reply." *Geology* 27 (1999): 92.
- Wilf, P. and C. C. Labandeira. "Plant-insect Associations Respond to Paleocene-Eocene Warming." *Early Paleogene Warm Climates and Biosphere Dynamics Conference Abstract Volume*, 1999.
- Wilf, P. and C. C. Labandeira. "Response of Plant-insect Associations to Paleocene-Eocene Warming." *Science* 284 (1999): 2153–2156.
- Wing, S. L. "Rates of Floral Change Scale to Duration of Measurement." *Geol. Soc. America Ann. Meeting, Abstract with Program* (1998): A-37.
- Yochelson, E. L. "Rejection of Carboniferous *Quasidentalium* Shimansky, 1974, from the Phylum Mollusca." *Journal of Paleontology* 73 (1999): 63–65.
- . Ten biographical sketches as follows: Berry, Edward Wilber, 685–686; Clark, William Bullock, 957–958; Chamberlain, Rollin Thomas, 639–640; Darton, Nelson Horatio, 119–120; Hayes, Charles Willard, 388–390; Hill, Robert Thomas, 801–802; Keith, Arthur, 457–458; Lesquerox, Leo, 522–523; White, David, 188–190; and Walcott, Charles Doolittle, 467–468. *American National Biography*. Oxford University Press, 1999.
- . "Review 'How the Canyon Became Grand.'" *Earth Sciences History* 17 (1999): 222.
- Yochelson, E. L. and R. Goodison. "Devonian *Dentalium martini* Whitfield, 1882, is not a Mollusk, but a Worm." *Journal of Paleontology* 73(4) (1999): 634–640.

### Department of Vertebrate Zoology

- Austin, C. C. and G. R. Zug. "Molecular and Morphological Evolution in the South Central Pacific Skink *Emoia tongana* (Reptilia: Squamata): Uniformity and Human-mediated Dispersal." *Australian Journal of Zoology* 47 (1999): 425–437.
- Baldwin, C. C. and W. Leo Smith. "*Belonoperca pylei*, a New Species of Seabass (Teleostei: Serranidae: Epinephelinae: Diploprionini) from the Cook Islands with Comments on Relationships Among Diploprionins." *Ichthyological Research* 45 (1998): 325–339.
- Banford, H.M., E. Bermingham, B.B. Collette, and S.S. McCafferty. "Phylogenetic Systematics of the *Scomberomorus regalis* (Teleostei: Scombridae) Species Group: Molecules, Morphology and Biogeography of Spanish Mackerels." *Copeia* (1999): 596–613.
- Bunch, T. D., S.Q. Wang, R. S. Hoffmann, Y.P. Zhang, A.H. Liu, S.Y. Lin, and W. Wang. "Diploid Chromosome Number and Karyotype of the Dalai-lamae Argali (*Ovis ammon dalai-lamae* Przevalskii, 1888)." *Encyelia, Journal of the Utah Academy of Sciences, Arts, and Letters*, 74 (1998): 255–263.



- Burns, J.R., S.H. Weitzman, K.R. Lange, and L.R. Malabarba. "Sperm Ultrastructure in Characid Fishes (Teleostei: Characidae)." Malabarba, L.R., R.P. Vari., R.E. Reis, Z.M.S. Lucena and C.A.S. Lucena, eds. *Phylogeny and Classification of Neotropical Fishes*. Porto Alegre, Brazil: Museu de Ciências e Tecnologia, Pontifícia Universidade Católica do Rio Grande do Sul, 1998, 235–244.
- Carleton, M. D., and S. L. Olson. "Amerigo Vespucci and the Rat of Fernando de Noronha: a New Genus and Species of Rodentia (Muridae: Sigmodontinae) from a Volcanic Island off Brazil's Continental Shelf." *American Museum Novitates* 3256 (1999): 1–59.
- Castle, P.H.J., and D.G. Smith. "A Reassessment of the Eels of the Genus *Bathycongrus* in the Indo-west Pacific." *Journal of Fish Biology* 54 (1999): 973–995.
- Colket, E., and D. E. Wilson. "*Taphozous bildegardeae*." *Mammalian Species* 597 (1998): 1–3.
- Collette, B.B. Review: *Fishes of Chesapeake Bay*, by E. Murdy, R. Birdsong, and J. Musick. *Journal of Experimental Marine Biology and Ecology* 225 (1998): 155–168.
- . "ITIS, the Integrated Taxonomic Information System." R.T. Fraser and V.C. Kaser, eds. *Metadiversity: the Grand Challenge for Biodiversity Information Management through Metadata*. National Federation of Abstracting & Information Services, 1999, 63–67.
- . "Mackerels, Molecules, and Morphology." *Proceedings 5<sup>th</sup> Indo-Pacific Fish. Conference*, Noumea, 1997, Société Française d'Ichtyologie, 1999, 149–164.
- Collette, B.B., and N.V. Parin. "Flyingfishes & their Allies." J.R. Paxton and W.N. Eschmeyer, eds. *Encyclopedia of Fishes*. 2nd ed. Academic Press, 1998, 144–147.
- Cooper, J.A. and F. Chapleau. "Monophyly and Intra-relationships of the Family Pleuronectidae (Pleuronectiformes), with a Revised Classification." *Fishery Bulletin* 96(4) (1998): 686–726.
- . "Phylogenetic Status of *Paralichthodes algoensis* (Pleuronectiformes: Paralichthodidae)." *Copeia* 2 (1998): 477–481.
- Crombie, R. I. "Jamaica." B. I. Crother, ed. *Caribbean Amphibians and Reptiles*. San Diego: Academic Press, 1999, 63–92.
- Crombie, R. I. and G. K. Pregill. "A Checklist of the Herpetofauna of the Palau Islands (Republic of Belau), Oceania." *Herpetological Monographs*. 13 (1999): 29–80.
- de Queiroz, K. "The General Lineage Concept of Species, Species Criteria, and the Process of Speciation: A Conceptual Unification and Terminological Recommendations." *Endless Forms: Species and Speciation*. D. J. Howard and S. H. Berlocher, eds. Oxford: Oxford University Press, 1998, 57–75.
- . "The General Lineage Concept of Species and the Defining Properties of the Species Category." (Chapter 3) *Species: New Interdisciplinary Essays*. R. A. Wilson, ed. Cambridge, MA: MIT Press, 1999, 49–89.
- de Queiroz, K., L.-R. Chu, and J. B. Losos. "A Second *Anolis* Lizard in Dominican Amber and the Systematics and Ecological Morphology of Dominican Amber Anoles." *American Museum Novitates* 3249 (1998): 1–23.
- Dove, C. J. "Where Do All Those Feathers Go?" *Flying Safety* 55(4) (1999): 16–18.
- . "Feather Identification and a New Electronic System for Reporting US Air Force Bird Strikes." *Proceedings of Bird Strike 1999*, 225–229.
- Dove, Carla J., and R. C. Banks. "A Taxonomic Study of Crested Caracaras (Falconidae)." *Wilson Bulletin* 111(3) (1999): 330–339.
- Dowsett, R. J., S. L. Olson, M. S. Roy, and F. Dowsett-Lemaire. "Systematic Status of the Black-collared Bulbul *Neolestes torquatus*." *Ibis*, 14(1) (1999): 22–28.
- Emmons, L.H. "Jaguar *Panthera onca*." D.E. Wilson and S. Ruff, eds. *The Smithsonian Book of North American Mammals*. Washington, D.C.: Smithsonian Institution Press, 1999, 236–237.
- . "Of Mice and Monkeys: Primates as Predictors of Mammal Community Richness." *Primate Communities*, J. G. Fleagle, C. Janson, and K. Reed, eds. Cambridge: Cambridge University Press, 1999, 171–188.
- Erdmann, M.V., R. L. Caldwell, S. L. Jewett and A. Tjakrawidjaja. "The Second Recorded Living Coelacanth from North Sulawesi." *Environmental Biology of Fishes* 54 (1999): 445–451.
- Foster, M. S., and L. S. DeLay. "Dispersal of Mimetic Seeds of Three Species of *Ormosia* (Leguminosae)." *Journal of Tropical Ecology*. 14 (1998): 389–411.
- Foster, M. S., and J. Terborgh. "Impact of a Rare Storm Event on an Amazonian Forest." *Biotropica* 30 (1998): 470–474.
- Frith, C.B., and B. M. Beehler. *The Birds of Paradise*. Oxford: Oxford University Press, 1998.
- Gardner, A.L. 1999. "Order Didelphimorphia." D.E. Wilson and S. Ruff, eds. *The Smithsonian Book of North American Mammals (xxvi)*. Vancouver: UBC Press, 1999, 1–5.
- Gardner, A.L., and P. Cortés-Calva. "Didelphidae." S.T. Alvarez-Castaneda and J.L. Patton, eds. *Mamíferos del noroeste de México*. La Paz, Baja California Sur, México: Centro de Investigaciones Biológicas del Noroeste, S.C., 1999, 29–38.
- Gardner, A. L., and C.B. Robbins. "Case 3058. *Arctocephalus* F. Cuvier, 1826 and *Callorhinus* Gray, 1859 (Mammalia, Pinnipedia): Proposed Conservation by the Designation of *Phoca pusilla* Schreber, [1775] as the Type Species of *Arctocephalus*: and *Otaria* Péron, 1816 and *Eumetopias* Gill, 1866: Proposed Conservation by the Designation of *Phoca leonina* Molina, 1782 as the Type Species of *Otaria*." *Bulletin of Zoological Nomenclature* 56(2) (1999): 136–141.
- Glenn, T.C., H.C. Dessauer, and M. J. Braun. "Characterization of Microsatellite DNA Loci in American Alligators." *Copeia* 3 (1998): 591–601.
- Handley, C.O., Jr. "Deer/Mouse *Peromyscus maniculatus*." D.E. Wilson and S. Ruff, eds. *The Smithsonian Book of North American Mammals*. Washington, D.C.: Smithsonian Institution Press, 1999, 574–577.
- Handley, C. O., Jr., and J. Ochoa G. "New Species of Mammals from Northern South America: A Sword-noted Bat, Genus *Lonchorhina tomes* (Chiroptera):



- Phyllostomidae." *Memoria* (Sociedad de Ciencias Naturales La Salle) 57(148) (1998): 71–82.
- Hendler, G., C.C. Baldwin, D.G. Smith, and C.E. Thacker. "Planktonic Dispersal of Juvenile Brittle Stars (Echinodermata; Ophiuroidea) on a Caribbean Reef." *Bulletin of Marine Science*, 65(1) (1999): 283–288.
- Heyer, W. R. "The Relationships of *Leptodactylus diedrus* (Anura, Leptodactylidae)." *Alytes* 16(1–2) (1998): 1–24.
- . "A New Genus and Species of Frog from Bahia, Brazil (Amphibia: Anura: Leptodactylidae) with Comments on the Zoogeography of the Brazilian Campos Rupestres." *Proceedings of the Biological Society of Washington* 112(1) (1999): 19–39.
- Heyer, W. R., and A. M. Muñoz. "Validation of *Eleutherodactylus crepitans* Bokermann, 1965, Notes on the Types and Type Locality of *Telatrema heterodactylum* Miranda-Ribeiro, 1937, and Description of a New Species of *Eleutherodactylus* from Mato Grosso, Brazil (Amphibia: Anura: Leptodactylidae)." *Proceedings of the Biological Society of Washington* 112(1) (1999): 1–18.
- Hoffmann, R.S., scientific ed. English edition of the Russian-language series *Mammals of the Soviet Union*. Vol. II, Part 1a, Sirenia and Carnivora (Sea Cows; Wolves and Bears) by V.G. Heptner et al. Washington, D.C.: SI Libraries and National Science Foundation, 1998.
- Humphries, C. J., and L. R. Parenti. *Cladistic Biogeography: Interpreting Patterns of Plant and Animal Distributions, Second edition*. Oxford: Oxford University Press, 1999.
- Imamura, H., and L. W. Knapp. "Review of the Genus *Bembras* Cuvier, 1829 (Scorpaeniformes: Bembridae) with Description of Three New Species Collected from Australia and Indonesia." *Ichthyological Research* 45(2) (1998): 113–212.
- Jackman, T. R., A. Larson, K. de Queiroz, and J. B. Losos. "Phylogenetic Relationships and Tempo of Early Diversification in *Anolis* Lizards." *Systematic Biology* 48(2) (1999): 254–285.
- Kalko, E. K. V. "Organization and Diversity of Tropical Bat Communities through Space and Time." *Zoology* 101 (1998): 281–297.
- Kalko, E. K. V., D. Frimel, C. O. Handley, Jr., and H.-U. Schnitzler. "Roosting and Foraging Behavior of Two Neotropical Gleaning Bats (*Tonatia silvicola* and *Trachops cirrhosus* Phyllostomidae)." *Biotropica* 31(2) (1999): 344–353.
- King, B. E., and P. C. Rasmussen. "The Rediscovery of the Forest Owlet *Athene (Heteroglaux) blewitti*." *Forktail: Journal of the Oriental Bird Club* 14 (1998): 51–53.
- Krabbe N., M. L. Isler, P. R. Isler, B. M. Whitney, J. Alvarez A., and P. J. Greenfield. "A New Species in the *Myrmotherula haematonota* Superspecies (Aves: Thamnophilidae) from the Western Amazonian Lowlands of Ecuador and Peru." *The Wilson Bulletin* (1999): 111.
- Kress, W. J., W. R. Heyer, P. Acevedo, J. Coddington, D. Cole, T. L. Erwin, B. J. Meggers, M. Pogue, R. W. Thorington, R. P. Vari, M. J. Weitzman, and S. H. Weitzman. "Amazonian Biodiversity: Assessing Conservation Priorities with Taxonomic Data." *Biodiversity and Conservation* 7 (1998): 1577–158.
- Malabarba, L.R., R. E. Reis, R. P. Vari, Z. M. S. Lucena, and C. A. S. Lucena. Preface L. R. Malabarba, R. E. Reis, R. P. Vari, Z. M. S. Lucena, and C. A. S. Lucena, eds. *Phylogeny and Classification of Neotropical Fishes*. Porto Alegre, Brazil: Museu de Ciências e Tecnologia -PUCRS, 1998.
- Malabarba, L.R., R. E. Reis, R. P. Vari, Z. M. S. Lucena, and C. A. S. Lucena, eds. *Phylogeny and Classification of Neotropical Fishes*. Porto Alegre, Brazil: Museu de Ciências e Tecnologia -PUCRS, 1998.
- Malabarba, L.R., and S. H. Weitzman. "A New Genus and Species of South American Fish (Teleostei: Characidae: Cheirodontinae) with a Derived Caudal Fin, Including Comments on Inseminating Cheirodontines." *Proceedings of the Biological Society of Washington* 112 (2) (1999): 411–432.
- Malabarba, L.R., S.H. Weitzman and J.R. Burns. "Compsurini [a New Tribe of Cheirodontine Fishes]." Malabarba, L.R., ed. *Characters and Major Clades of the Cheirodontinae (Teleostei: Characidae)*, 1998, 191–232.
- Malabarba, L.R., R.P. Vari, R.E. Reis, Z.M.S. Lucena and C.A.S. Lucena, eds. *Phylogeny and Classification of Neotropical Fishes*. Porto Alegre, Brazil: Museu de Ciências e Tecnologia, Pontifícia Universidade Católica do Rio Grande do Sul, 1998, 216–219.
- Marshall, J. T. *Identification and Names of Eurasian House Mice and Their European Allies, Subgenus Mus (Rodentia: Muridae)*. Privately printed, Springfield, Virginia, 1998.
- McDiarmid, R. W., and R. Altig. *Tadpoles, The Biology of Anuran Larvae*. Chicago: The University of Chicago Press, 1999.
- McDiarmid, R. W., J. A. Campbell, and T. A. Touré. *Snake Species of the World. A Taxonomic and Geographic Reference. Vol. 1*. Washington, D.C.: Herpetologists' League, 1999.
- Meisner, A.D., and B. B. Collette. "A New Species of Viviparous Halfbeak, *Dermogenys bispina* (Teleostei: Hemiramphidae) from Sabah (North Borneo)." *Raffles Bulletin of Zoology*, 46(2) (1999): 373–380.
- . "Generic Relationships of the Internally-fertilized Southeast Asian Halfbeaks (Hemiramphidae: Zenarchopterinae)." *Proceedings 5th Indo-Pacific Fish. Conference Moumea, 1997, Société Française d'Ichtyologie* (1999): 69–76.
- Munroe, T.A., and K. Amaoka. "*Symphurus hondoensis* Hubbs, 1915, a Valid Species of Western Pacific Tonguefish (Pleuronectiformes: Cynoglossidae)." *Ichthyological Research* 45(4) (1998): 385–391.
- Olson, S. L. "Comment on the Proposed Suppression of all Prior Usages of Generic and Specific Names of Birds (Aves) by John Gould and Others Conventionally Accepted as Published in *The Proceedings of the Zoological Society of London* (Case 3044; see BZN 54:172–182)." *Bulletin of Zoological Nomenclature* 55(3) (1998): 176–181.
- . "Lectotypification of *Charadrius rubricollis* Gmelin, 1789." *Bulletin of the British Ornithologists' Club* 118(4) (1998): 256–259.

- . "Kona Finch (*Chloridops kona*), Greater Koa-Finch (*Rhodacanthis palmeri*), Lesser Koa-Finch (*Rhodacanthis flaviceps*)." *The Birds of North America* 424 (1999): 1–19.
- . "Laysan Rail (*Porzana palmeri*), Hawaiian Rail (*Porzana sandwichensis*)." *The Birds of North America* 426 (1999): 1–19.
- . "Early Eocene Birds from Eastern North America: a Faunule from the Nanjemoy Formation of Virginia." Robert E. Weems and Gary J. Grimsley, eds. *Early Eocene Vertebrates and Plants from the Fisher/Sullivan Site (Nanjemoy Formation) Stafford County, Virginia*. Virginia Division of Mineral Resources Publication 152 (1999): 123–132.
- . "A New Species of Pelican (Aves: Pelecanidae) from the Lower Pliocene of North Carolina and Florida." *Proceedings of the Biological Society of Washington* 112(3) (1999): 503–509.
- Parenti, L. R. "Collective Spirit." [Critique of] *Collection building in Ichthyology and Herpetology*. 1997. T. Pietsch and W. Anderson, eds. American Society of Ichthyologists and Herpetologists. *Environmental Biology of Fishes* 55 (1999): 203–206.
- Parenti, L. R., J. Clayton and J. Howe. "Catalog of Type Specimens of Recent Fishes in the National Museum of Natural History, Smithsonian Institution, 9: Family Poeciliidae (Teleostei: Cyprinodontiformes)." *Smithsonian Contributions to Zoology* 604 (1999): 1–22.
- Poe, S., and D. L. Swofford. "Taxon Sampling Revisited." *Nature* 398 (1999): 300–301.
- Powell, R., R. I. Crombie, and H. E. A. Boos. "*Hemidactylus mabouia*." *Catalogue of American Amphibians and Reptiles* 674(1998): 1–11.
- Rasmussen, P. C. "Tytler's Leaf Warbler *Phylloscopus tytleri*: Non-Breeding Distribution, Morphological Discrimination, and Aging." *Forktail: Journal of the Oriental Bird Club* 14 (1998): 17–28.
- Rasmussen, P. C. and N. J. Collar. "Identification, Distribution and Status of the Forest Owlet *Athene (Heteroglaux) blewitti*." *Forktail: Journal of the Oriental Bird Club* 14 (1998): 41–49.
- . "Major Specimen Fraud in the Forest Owlet *Heteroglaux (Athene auct.) blewitti*." *Ibis* 141 (1999): 11–21.
- . "On the Hybrid Status of *Psittacula intermedia* (Aves: Psittacidae)." *Bulletin of The Natural History Museum of London (Zoology)* 65(1) (1999): 31–50.
- Rasmussen, P. C., and Farah Ishtiaq. "Vocalizations and Behaviour of the Forest Owlet *Athene (Heteroglaux) blewitti*." *Forktail: Journal of the Oriental Bird Club* 15 (1999): 61–66.
- Rasmussen, P. C., and F. R. Lambert. "A New Scops Owl from Sangihe Island, Indonesia." *Bulletin B.O.C.* 118 (4) (1998): 204–217.
- Remsen, J. V., and R. T. Brumfield. "Two New Subspecies of *Cinnycerthia fulva* (Aves: Troglodytidae) from the Southern Andes." *Proceedings of the Biological Society of Washington*. 111 (1998): 1008–1015. (One of the subspecies was named in honor of Gary Graves, Curator of Birds.)
- Rodda, G. H., T. H. Fritts, C. S. Clark, S. W. Gotte, and D. Chiszar. 1999. "A State-of-the-Art Trap for the Brown Tree Snake." Rodda, G., Y. Sawai, D. Chiszar, and H. Tanaka (eds.), *Problem Snake Management: The Habu and the Brown Treesnake*. Ithaca, NY: Comstock Publishing Associates, 268–284.
- Rodriguez-H., B., and D. E. Wilson. "Lista y Distribucion de las Especies de Murciélagos de Costa Rica." *Occasional Papers in Conservation Biology, Conservation International* 5:1–34.
- Scoles, D.R., B.B. Collette, and J.E. Graves. "Global Phylogeography of Mackerels of the Genus *Scomber*." *Fishery Bulletin, U.S.* 96(4) (1998): 823–842.
- Smith, D. G., and C. C. Baldwin. "*Psilotris amblyrhynchus*, a New Seven-spined Goby (Teleostei: Gobiidae) from Belize, with Notes on Settlement-stage Larvae." *Proceedings of the Biological Society of Washington* 112 (2) (1999): 433–442.
- Smith-Vaniz, W. F., B. B. Collette, and B. E. Luckhurst. *Fishes of Bermuda: History, zoogeography, annotated checklist, and identification keys*. American Society of Ichthyologists and Herpetologists Special Publication 4 (1999).
- Solari, S., J. J. Rodriguez, E. Vivar, D. E. Wilson, and R. J. Baker. "Bats." *Biodiversity Assessment and Monitoring of the Lower Urumbamba Region, Peru*. F. Dallmeier and A. Alonso, eds. SI/MAB Series #1, Washington, D.C.: Smithsonian Institution, 1999, 293–302.
- Springer, V. G. "Are the Indonesian and Western Indian Ocean Coelacanths Conspecific: a Prediction." *Environmental Biology of Fishes* 54 (1999): 453–456.
- Tang K.L., P.B. Berendzen, E.O. Wiley, J.F. Morrissey, R. Winterbottom, and G.D. Johnson. "The Phylogenetic Relationships of the Suborder Acanthuroidei (Teleostei: Perciformes) Based on Morphological and Molecular Evidence." *Molecular Phylogenetics and Evolution* (1999): 415–425.
- Terwilliger, M.R., and T. A. Munroe. "Age, Growth, Longevity, and Mortality of Blackcheek Tonguefish, *Symphurus plagiusa* (Cynoglossidae: Pleuronectiformes), in Chesapeake Bay, Virginia." *Fishery Bulletin* 97 (1999): 340–361.
- Thorington, R. W., Jr., A. M. L. Miller, and C. G. Anderson. "Arboreality in Tree Squirrels (Sciuridae)." M. A. Steele, J. F. Merrit, and D. A. Zegers, eds. *Ecology of Tree Squirrels*. Special Publication, Virginia Museum of Natural History, 6 (1998): 119–129.
- Vari, R. P. "Higher Level Phylogenetic Concepts within Characiformes (Ostariophysi), a Historical Review." L. R. Malabarba, R. E. Reis, R. P. Vari, Z. M. S. Lucena, and C. A. S. Lucena, eds. *Phylogeny and Classification of Neotropical Fishes*. Porto Alegre, Brazil: Museu de Ciências e Tecnologia –PUCRS, 1998, 111–122.
- Vari, R. P. and C. J. Ferraris, Jr. "The Neotropical Catfish Genus *Epapterus* (Siluriformes: Auchenipteridae): A Reappraisal." *Proceedings of the Biological Society of Washington* 111(4) (1998): 992–1007.
- Vari, R. P. and A. S. Harold. "The Genus *Creagrutus* (Teleostei: Characiformes: Characidae): Monophyly, Relationships, and Undetected Diversity." L. R. Malabarba, R. E. Reis, R. P. Vari, Z. M. S. Lucena, and C.

- A. S. Lucena, eds. *Phylogeny and Classification of Neotropical Fishes*. Porto Alegre, Brazil: Museu de Ciências e Tecnologia -PUCRS, 1998, 246–260.
- Vari, R. P. and L. R. Malabarba. "Neotropical Ichthyology: An Overview." L. R. Malabarba, R. E. Reis, R. P. Vari, Z. M. S. Lucena, and C. A. S. Lucena, eds. *Phylogeny and Classification of Neotropical Fishes*. Porto Alegre, Brazil: Museu de Ciências e Tecnologia -PUCRS, 1998, 1–11.
- Walker, J.L., C.W. Potter, and S.A. Macko. "The Diets of Modern and Historic Bottlenose Dolphin Populations Reflected Through Stable Isotopes." *Marine Mammal Science* 15 (1999): 335–350.
- Weitzman, S.H. Book review of: Araujo-Lima, C., and M. Goulding, *So Fruitful a Fish: Ecology, Conservation and Aquaculture of the Amazon*. Columbia Univ. Press. *AAAS Science Books and Films* 43(2) (1998): 41–42.
- . Book review of: Bartham, R., and M. Goulding, *The Catfish Connection: Ecology, Migration, and Conservation of Amazon Predators*. Columbia Univ. Press. *AAAS Science Books and Films* 43(2) (1998): 42.
- Weitzman, S.H. and H.-G. Evers. "Der Geschichte von *Tanichthys albonubes* und *Hemigrammocypripis lini*. *TI, Aquaristik Fachmagazin*." *Jahrgang* 30(5) (1998): 45–53.
- Weitzman, S.H. and L.R. Malabarba. "Perspectives about the Phylogeny and Classification of the Characidae (Teleostei: Characiformes)." Malabarba, L.R., R.P. Vari, R.E. Reis, Z.M.S. Lucena and C.A.S. Lucena, eds. *Phylogeny and Classification of Neotropical Fishes*. Porto Alegre, Brazil: Museu de Ciências e Tecnologia, Pontifícia Universidade Católica do Rio Grande do Sul, 1998, 161–170.
- . "Systematics of *Spintherobolus* (Teleostei: Characidae: Cheirodontinae) from Eastern Brazil." *Ichthyological Exploration of Freshwaters* 10(1) (1999): 1–43.
- Weitzman, S.H. and N.A. Menezes. "Relationships of the Tribes and Genera of the Glandulocaudinae (Ostariophysi: Characiformes: Characidae) with a Description of a New Genus, *Chrysobrycon*." Malabarba, L.R., R.P. Vari, R.E. Reis, Z.M.S. Lucena and C.A.S. Lucena, eds. *Phylogeny and Classification of Neotropical Fishes*. Porto Alegre, Brazil: Museu de Ciências e Tecnologia, Pontifícia Universidade Católica do Rio Grande do Sul, 1998, 171–192.
- Weitzman, S.H. and L. Palmer. "Phantom Tetras, a Brief Account of their Ichthyological and Aquarium History." *Tropical Fish Hobbyist* 46(11) (1998): 124–132.
- Widodo, W., Cox, J. H., and Rasmussen, P. C. "Rediscovery of Flores Scops Owl *Otus alfredi* on Flores, Indonesia, and Reaffirmation of its Specific Status." *Forktail: Journal of the Oriental Bird Club* 15 (1999): 15–24.
- Wiley, E.O., G.D. Johnson, and W. Dimmick. "The Phylogenetic Relationships of Lampridiform Fishes (Teleostei: Acanthomorpha) Based on a Total Evidence Analysis of Morphological and Molecular Data." *Molecular Phylogenetics and Evolution* (1999) 1–10.
- Wilson, D. E. "Marsupials, Insectivores, and Xenarthrans." *Wild Animals of North America*. Washington, D.C.: National Geographic Society, 1998, 11–41.
- . Foreword. *Walker's Mammals of the World* (R. M. Nowak). Baltimore: Johns Hopkins Press, 1, 936 (1999): xi–xii.
- . "Long Term Monitoring of Bats in the Lower Urubamba Region." *Biodiversity Assessment and Monitoring of the Lower Urubamba Region, Peru*, F. Dallmeier and A. Alonso, eds. SI/MAB Series #1, Washington, D.C.: Smithsonian Institution, 1999, 303–310.
- Wilson, D.E. and S. Ruff. *The Smithsonian Book of North American Mammals*. Washington, D.C.: Smithsonian Institution Press, 1999.
- Zug, G. R. Foreword: "In Honor of Albert Schwartz." B. I. Crother, ed., *Caribbean Amphibians and Reptiles*. San Diego: Academic Press, 1999, xi–xii.
- Zug, G. R. and R. F. Glor. "Estimates of Age and Growth in a Population of Green Sea turtles (*Chelonia mydas*) from the Indian River Lagoon System, Florida: a Skeletochronological Analysis." *Canadian Journal of Zoology* [1998] 76 (1999): 1497–1506.
- Zug, G. R., Win, Thin, Min, Lhon, and Kyaw. "Herpetofauna of the Chatthin Wildlife Sanctuary, North-central Myanmar With Preliminary Observations of Their Natural History." *Hamadryad* 23(2) (1998): 111–120.

## National Portrait Gallery

### Office of the Director

- Carr, Carolyn K. *Hans Namuth: Portraits*. Washington, D.C.: Smithsonian Institution Press, 1999.
- Fern, Alan. Foreword to *American Characters: Selections from the National Portrait Gallery* by R. W. B. Lewis and Nancy Lewis. New Haven: Yale University Press, 1999.
- . Foreword to *Franklin & His Friends: Portraying the Man of Science in Eighteenth-Century America* by Brandon Brame Fortune with Deborah J. Warner. Washington, D.C.: National Portrait Gallery, in association with the University of Pennsylvania Press, 1999.
- . Foreword to *Hans Namuth: Portraits* by Carolyn Kinder Carr. Washington, D.C.: Smithsonian Institution Press, 1999.
- . Foreword to *Picturing Hemingway: A Writer in His Time* by Frederick S. Voss. New Haven: Yale University Press, 1999.
- . "Jacob Kainen." *Art on Paper* 4, no. 2 (November-December 1999): 32.
- . Review of *N. C. Wyeth: A Biography*, by David Michaelis. *Archives of American Art Journal* 38, nos. 1 & 2 (1998): 46–48.

### Department of History

- Barber, James G. *Theodore Roosevelt: Icon of the American Century*. Washington, D.C.: National Portrait Gallery and National Park Service, in association with the University of Washington Press, 1998.

Voss, Frederick S. *Picturing Hemingway: A Writer in His Time*. New Haven: Yale University Press, 1999.

### Department of Painting and Sculpture

- Fortune, Brandon Brame, with Deborah J. Warner. *Franklin & His Friends: Portraying the Man of Science in Eighteenth-Century America*. Washington, D.C.: National Portrait Gallery, in association with the University of Pennsylvania Press, 1999.
- Miles, Ellen G. Review of *The Genius of Gilbert Stuart*, by Dorinda Evans. *Archives of American Art Journal* 38, nos. 3 & 4 (1998): 39–41.

### Peale Family Papers

- Hart, Sidney. "Charles Willson Peale's Portrait of William Pitt." *Northern Neck of Virginia Historical Magazine* 49, no. 1 (December 1999): 5865–79.
- Ward, David C. "An Artist's Self-Fashioning: The Forging of Charles Willson Peale." *Word & Image: A Journal of Verbal/Visual Enquiry* 15, no. 2 (April–June 1999): 107–27.
- . "Dam and River: Two Ways to Art in the 1950s." *PNR: Poetry Nation Review* 129 (September–October 1999): 28–31.
- . "Jacob Eichholtz." *American National Biography*. New York: Oxford University Press, 1999.
- . "John Wesley Jarvis." *American National Biography*. New York: Oxford University Press, 1999.

### Department of Photographs

- Panzer, Mary C. "Jump! The Man Who Made the Stars Shine." *The Sunday Review* (October 25, 1998): 28–34.
- . "The Painter of Modern Life." Review of *Walker Evans*, by James R. Mellow. *Boston Book Review* (June 1999): 16.
- . "The Return of Portraiture: Sargent, Ingres, Meisel." *Boston Book Review* (September 1999): 5–6.
- Shumard, Ann M. *A Durable Memento: Portraits by Augustus Washington. African American Daguerreotypist* (exhibition booklet). Washington, D.C.: National Portrait Gallery, 1999.

### Department of Prints and Drawings

- Reaves, Wendy Wick. "David Edwin." *American National Biography*. New York: Oxford University Press, 1999.
- . *Edward Sorel: Unauthorized Portraits* (exhibition booklet). Washington, D.C.: National Portrait Gallery, 1999.
- Wagner, Ann. Review of *Adirondack Prints and Printmakers: The Call of the Wild*, ed. Caroline Mastin Welsh. *Winterthur Portfolio: A Journal of American Material Culture* 34, nos. 2/3 (summer/autumn 1999): 165–68.

## National Postal Museum

### Curatorial Department

- Pope, Nancy A. "As Precious as Gold," *EnRoute* Vol. 7 #3.
- . "Concord Mail Coach," *Mekeel's*, summer 1998.
- . "Highlights from the NPM: the Mailster," *Mekeel's* summer 1998.
- . *As Precious As Gold: Stories from the Gold Rush*, National Postal Museum online exhibition featuring 12 articles chronicling aspects of the Klondike and Alaska gold rushes. <http://www.si.edu/postal/gold/gold2.html>. October 9, 1998.

## National Zoological Park

- Aguilar, R.F., Tophan, K., Heatley, J.J., Nichols, D., Cross, J., Bauer, R., Garner, M.: Neural angiostrongylosis in nonhuman primates: diagnosis, treatment, and control of an outbreak in southern Louisiana. *Proceedings: Am Assoc Zoo Vet Ann Meet*, pp. 272–276, 1999.
- Alonso, A., Dallmeier, F.: Biodiversity Assessment of the Lower Urubamba Region, Peru. Pagoreni Well Site: Assessment and Training, Washington, D.C., Smithsonian Institution/MAB Biodiversity Program, 1999.
- Amb, S., Boness D.J., Bowen W.D., Perry, E.A., Fleischer, R.C.: Extra-consort fertilizations in grey seals: the effects of female location and age. *Animal Behaviour* 58: 527–535, 1999.
- Asher, G.W., Monfort, S.L., Wemmer, C.: Comparative reproductive function in cervids: implications for management of farm and zoo populations. *Journal of Reproduction & Fertility* 54: 143–156, 1999.
- Berger, J.: Anthropogenic extinction of top carnivores and interspecific animal behaviour: implications of the rapid decoupling of a web involving bears, moose and ravens. *Proc. Royal Society of London* 266: 2261–2267, 1999.
- Berger, J., Gompper, M.E.: Sex ratios in extant ungulates: Products of contemporary predation or past life histories? *Journal of Mammalogy* 80: 1084–1113, 1999.
- Berger, J., Testa J.W., Roffe T., and Monfort, S.L.: Conservation endocrinology for understanding ecological interactions and in situ biological restoration. *Conservation Biology* 13: 980–989, 1999.
- Blanco, J. M., Tselutin, K., Gee, G., Wildt, D. E., and Donoghue, A. M.: Comparative cryopreservation of poultry sperm: characterization of sperm survival after rapid or slow freezing methods and the use of 6% dimethylacetamide as a cryoprotectant for chicken and turkey sperm. *Proc. Poultry Science*. (Suppl. 1) 78:33. 1999.
- Boness, D.J.: The grey seal, *Halichoerus grypus*. In edited by Wilson, D.E., Ruff, S., 211–213. Washington, D.C., Smithsonian Institution Press, 1999.
- Boness, D.J.: The hooded seal, *Cystophora cristata*. In edited by Wilson, D.E., Ruff, S., 215–216. Washington, D.C., Smithsonian Institution Press, 1999.

- Boness, D.J.: The ribbon seal, *Phoca fasciata*. In edited by Wilson, D. E., Ruff, S., 203–204. Washington, D.C., Smithsonian Institution Press, 1999.
- Bowen, W.D., Boness, D.J., Iverson, S.J.: Diving of lactating harbor seals and their pups during maternal foraging trips. *Canadian Journal of Zoology* 77: 978–988, 1999.
- Brown, J.L.: Difficulties associated with diagnosis and treatment of ovarian dysfunction in elephants—the flatliner problem. *Journal of the Elephant Managers Association* 20: 55–61, 1999.
- Brown, J.L.: Problems with ovarian dysfunction in elephants. *Proc. Society for the Study of Reproduction*. (Suppl.) 60: 460. *Biology of Reproduction*. 1999
- Brown, J.L., Hildebrandt, W., Theison, W., Neiffer, D.L.: Endocrine and ultrasound evaluation of a non-cycling African elephant: identification of a follicular ovarian cyst. *Zoo Biology* 18: 223–232, 1999.
- Brown, J.L., Schmitt, D.L., Bellem, A., Graham, L.H., Lehnhardt, J.: Hormone secretion in the Asian elephant (*Elephas maximus*): characterization of ovulatory and anovulatory LH surges. *Biology of Reproduction* 61: 1294–1299, 1999.
- Bush, M. and Montali, R.J.: *Medical Management of Tree Kangaroos*. M. Fowler and E. Miller, eds., *Zoo and Wild Animal Medicine, Current Therapy* 4, W.B. Saunders & Co., Philadelphia, 337–343, 1999.
- Carlstead, K., Fraser, J., Bennett, C., Kleiman, D.G.: Black rhinoceros (*Diceros bicornis*) in U.S. zoos: II. Behavior, breeding success, and mortality in relation to housing facilities. *Zoo Biology* 18: 35–52, 1999.
- Carlstead, K., Kleiman, D.G.: Behaviour profiles of individual animals: a new tool for multi-institutional studies. *EAZA News* 27:12–15, 1999.
- Carlstead, K., Mellen, J., Kleiman, D.G.: Black rhinoceros (*Diceros bicornis*) in U.S. zoos: I. Individual behavior profiles and their relationship to breeding success. *Zoo Biology* 18: 17–34, 1999.
- Christie, S., Seidensticker, J.: Is re-introduction of captive-bred tigers a feasible option for the future? In *Riding the Tiger: Tiger Conservation in Human-dominated Landscapes*, edited by Seidensticker, J., Christie, S., Jackson, P., 207–209. Cambridge, Massachusetts, Cambridge University Press, 1999.
- Comiskey, J. A.: *Forest Structure and Dynamics in the Beni Biosphere Reserve, Bolivia*. London, U.K., University of London. 1999.
- Comiskey, J. A. and Mosher, R.: *BioMon: Biodiversity Monitoring Database for Windows*. Washington, D.C., SI/MAB, Smithsonian Institution. 1999.
- de Silva, A.M., Dittus, W.P., Amerasinghe, P.H., Amerasinghe, F.P.: Serologic evidence for an epizootic Dengue virus infecting toque macaques (*Macaca sinica*) at Polonnaruwa, Sri Lanka. *American Journal of Tropical Medicine and Hygiene* 60: 300–306, 1999.
- Dias, J.L.C. and Nichols, D.K.: Neoplasia in snakes at the National Zoological Park, Washington, D.C. (1978–1997). *J Comp. Path.* 120:89–95, 1999.
- Dobson, A., Ralls, K., Foster, M., Soulé, M.E., Simberloff, D., Doak, D., Estes, J.A., Mills, L.S., Mattson, D., Dirzo, R., Arita, H., Ryan, S., Norse, E.A., Noss, R.F., Johns, D.: Connectivity: maintaining flows in fragmented landscapes. In *Continental Conservation: Design and Management Principles for Long-Term, Regional Conservation Networks*, edited by Soulé, M., Terborgh, J., 129–170. Washington, D.C., Island Press, 1999.
- Donovan, T.M., Petit, L.J., Freemark, K.E., Maurer, B., Saab, V.A., Robinson, S.K.: Setting local and regional objectives for the persistence of bird populations. In edited by Bonney, R., Pashley, D.N., Cooper, R., Niles, L., <http://birds.cornell.edu/pifcapemay>. Ithica, Cornell Lab of Ornithology Web publication, 1999.
- Dumbacher, J.P.: The evolution of toxicity in Pitohuis: I. Effects of homobatrachotoxin on chewing lice (Order Phthiraptera). *Auk* 116: 957–963, 1999.
- Fjeldsa, J., Goodman, S. M., Schulenberg, T., and Slikas, B.: Molecular evidence for relationships of Malagasy birds. Adams, N. and Slotow, R. 22nd International Ornithological Congress, 3084–3094. University of Natal. 1999.
- Gill, F.B., Slikas, B., Agro, D.: Speciation in North American chickadees: II. Geography of mtDNA haplotypes in *Poecile carolinensis*. *Auk* 116: 274–277, 1999.
- Goldsworthy, S., Boness, D.J., Fleischer, R.C.: Mate choice in sympatric fur seals: female mate preference for conphenotypic males. *Behavioral Ecology and Sociobiology* 45: 253–267, 1999.
- González, S., Maldonado, J.E., Garcia, J.E., Barbanti Duarte, J.M.: Utilização de DNA fecal como ferramenta para análise genética no gênero *Mazama* (Mammalia: Cervidae). *Genetics and Molecular Biology* 22: 607, 1999.
- Greenberg, R.: Relationships between juvenile object exploration and foraging specialization in songbirds. Adams, N. and Slowtow, R. *Proceedings of the 22nd International Ornithological Congress*. 1999.
- Greenberg, R., Pravosudov, V., Kozlenko, A., Kontorschikov, V.: Vegetation history and foraging behavior of foliage gleaning birds in the Canadian and Russian boreal forests. *Oecologia* 120: 451–462, 1999.
- Hamilton, M.B.: Four primer pairs for the amplification of chloroplast intergenic regions with intraspecific variation. *Molecular Ecology* 8: 521–523, 1999.
- Hamilton, M.B.: Tropical tree gene flow and seed dispersal. *Nature* 401: 129, 1999.
- Hamilton, M.B., Fleischer, R.C.: Cloned microsatellite repeats differ between 4-base restriction endonucleases. *Journal of Heredity* 56: 1–3, 1999.
- Hamilton, M.B., Pincus, E.L., DiFiore, A., Fleischer, R.C.: Universal linker and ligation procedures for construction of genomic DNA libraries enriched for microsatellites. *Biotechniques* 27: 500–507, 1999.
- Hildebrandt, T.B., Goritz, F., Schnorrenberg, A., Hermes, R., Schmitt, D., Hagan, D., Peterson, J., Brown, J.L., Loskutoff, N., Pratt, N.C., Lehnhardt, J., Miller, G.,

- Montali, R.J., and Olson, D.: Successful Artificial Insemination of African Nulliparous Elephants at the Indianapolis Zoo. *Verh. ber. Erkr. Zootiere* 39: 41–45, 1999.
- Hoage, R.J.: Developing Strategies to Cope with Media Scrutiny: A Comparison of Three Cases. In *Resources for Crisis Management in Zoos and Other Animal Care Facilities*, edited by S.D. Chan, W.K. Baker, and D. L. Guerrero. American Association of Zoo Keepers, Inc., Topeka, KA. 1999.
- Hosack, D.A., Miller, K.V., Ware, L., Mashburn, K.L., Morrow, C.J., Williamson, L.R., Marchinton, R.L., Monfort, S.L.: Stag exposure advances the LH surge and behavioural oestrus in Eld's Deer hinds after CIDR Device synchronisation of oestrus. *Theriogenology* 51: 1333–1342, 1999.
- Howard, J. G.: Assisted reproductive techniques in nondomestic carnivores. M.E. Fowler and R.E. Miller. *Zoo and Wild Animal Medicine: Current Therapy IV*. 449–457. Philadelphia, PA, W.B. Saunders. 1999.
- Howard, J. G.: Reproductive biotechnology in conservation of endangered species. *Proc. Sero Symposium, Personnel in Reproductive Medicine*. 55–59. 1999.
- Howard, J. G., M.E. Fowler and R.E. Miller. *Zoo and Wild Animal Medicine: Current Therapy IV*. 449–457. Philadelphia, PA, W.B. Saunders Co. 1999.
- Howard, J.G., He, G., Li, X., Chen, H., Zhong, W., Zhang, J., Huang, S., Xie, Z., Janssen, D., Phillips, L., Ellis, S., Wildt, D.E.: Reproductive and biomedical survey of giant pandas in captivity in China. *American Society of Andrology*, 1999.
- Johnson, K.P., Sorenson, M.D.: Phylogeny and biogeography of dabbling ducks (Genus: *Anas*): A comparison of molecular and morphological evidence. *Auk* 116: 792–805, 1999.
- Johnson, W.E., Shinyashiki, F., Menotti-Raymond, M., Driscoll, C., Leh, C., Sunquist, M., Johnston, M., Bush, M., Wildt, D.E., Yuhki, N., O'Brien, S.J.: Molecular genetic characterization of two insular Asian cat species, Bornean bay cat and Iriomote cat. In *Evolutionary Theory and Processes: Modern Perspectives*, edited by S.P. Wasser, 223–248. 1999, Kluwer Academic Publishers, 1999.
- Joseph, L., Slikas, B., Rankin-Baransky, K., Bazartseren, B., Alpers, D., Gilbert, A.E.: DNA evidence concerning the identities of *Crax viridirostris* Sclater, 1875 and *C. estudilloi* Allen, 1977. *Ornithologia Neotropical* 10: 129–144, 1999.
- Kleiman, D.G.: Giant panda conservation today. *Zoogoer* 28:12–17, 1999.
- Kleiman, D.G.: Long-term evaluation and planning for golden lion tamarin conservation. *Tamarin Tales* 3:13–15, 1999.
- Lamirande, E.W., Nichols, D.K., Owens, J.W., Gaskin, J.M., Jacobson, E.R.: Isolation and experimental transmission of a reovirus pathogenic in ratsnakes (Elaphe species). *Virus Res.* 63: 135–141, 1999.
- Lamirande, E.W., Bratthauer, A.D., Fischer, D.C., Nichols, D.K.: Reference hematologic and plasma chemistry values of brown tree snakes (*Boiga irregularis*). *J Zoo Wild. Med.* 30: 516–520, 1999.
- Longcore, J.E., Pessier, A.P., Nichols, D.K.: *Batrachochytrium Dendrobatidis* gen. et. sp. nov., a chytrid pathogenic to amphibians. *Mycologia* 91: 219–227, 1999.
- Maldonado, J.E.: Family Soricidae. In edited by Alvarez-Castañeda, S.T., Patton, J.L., 39–52. Mexico City, Centro de Investigaciones Biologicas del Noroeste, 1999.
- Maldonado, J.E.: Family Talpidae. In edited by Alvarez-Castañeda, S.T., Patton, J.L., 53–55. Mexico City, Centro de Investigaciones Biologicas del Noroeste, 1999.
- Maldonado, J.E.: Fog shrew (*Sorex sonomae*). In edited by Wilson, D.E., Ruff, S., 40–41. Washington, D.C., Smithsonian Institution Press, 1999.
- Maldonado, J.E.: Pacific shrew (*Sorex pacificus*). In edited by Wilson D.E., Ruff, S., 36–37. Washington, D.C., Smithsonian Institution Press, 1999.
- McIninch, M. D., Bellem, A., MacDonald, S. E., Goodrowe, K. L., Brown, J. L., Graham, L. H., and Roth, T. L.: Monitoring fecal progesterone metabolites in the Sumatran rhinoceros (*Dicerorhinus sumatrensis*) by enzymeimmunoassay. *Proc. Endangered Species Breeding Conference*. p. 15. Cincinnati, OH. 1999.
- McShea, W.J., Leimgruber, P., Aung, M., Monfort, S., Wemmer, C.: The range collapse of thamin (*Cervus eldi*) and the extent of remaining habitat in central Myanmar. *Animal Conservation* 2: 173–183, 1999.
- Monfort, S.L., Wolfe, B.A., Blumer, E.S., Atkinson, M.W., Spindler, R.E., Pukazhenthi, B.S., Bush, M., Wildt, D.E., Roth, T.L., Morrow, C.J.: Artificial insemination in the scimitar-horned oryx as a conservation and management tool. *Proc. Am. Assoc. Zoo Vet.* 1: 77–82, 1999.
- Montali, R.J.: Important Aspects of Zoonotic Diseases in Zoo and Wildlife Species. *Verh. ber. Erkr. Zootiere* 39, 149–155, 1999.
- Montali, R.J., and Bush, M.: Diseases of the *Callitrichidae*. M. Fowler and E. Miller, eds.: *Zoo and Wild Animal Medicine, Current Therapy 4*, W.B. Saunders & Co., Philadelphia, 369–376, 1999.
- Morrow, C.J., Wildt, D.E., Monfort, S.L.: Reproductive seasonality in the female scimitar-horned oryx (*Oryx dammah*). *Animal Conservation* 2: 261–268, 1999.
- Murray, S., Lung, N.P., Alvarado, T.P., Gamble, K.C., Miller, M.A., Paglia, D.E., Montali, R.J.: Idiopathic hemorrhagic vasculopathy syndrome in seven black rhinoceros. *JAVMA*, 216(2):230–233, January 15, 1999.
- Nichols, D.K., Weyant, R.S., Lamirande, E.W., Sigler, L., Mason, R.T.: Fatal mycotic dermatitis in captive brown tree snakes (*Boiga irregularis*). *J Zoo Wild. Med.* 30: 111–118, 1999.
- Omland, K.E.: Book review of "Avian Molecular Evolution and Systematics." D. P. Mindell. *Systematic Biology* 48: 225–226, 1999.
- Orrock, J.L., Harper, E.K., Pagels, J.F., McShea, W.J.: Additional records of the rock vole, *Microtus chrotorrhinus*, in Virginia. *Banisteria* 14: 36–38, 1999.
- Pelican, K.M., Pukazhenthi, B.S., Wildt, D.E., Howard, J.G.: Discontinuous colloidal gradient centrifugation reduces sperm flagellum abnormalities but disrupts

- acrosomes in cat ejaculates. *Biology of Reproduction* (Suppl.) 535: 259, 1999.
- Penfold, L.M., Citino, C.B., Monfort, S.L., Wildt, D.E.: Investigating age and seasonality as potential contributors to pleiomorphic spermatozoa in gerenuk. *Biology of Reproduction* (Suppl.) 58: 259, 1999.
- Penfold, L.M., Herzog, T., Lynch, W., Ware, L., Wildt, D.E., Derrickson, S., Monfort, S.L.: Circannual circulating testosterone concentrations and semen characteristics in the Northern pintail duck (*Anas acuta*). *Journal of Andrology* (Suppl.) 64: 41, 1999.
- Perry, E.A.: The ringed seal, *Phoca hispida*. In edited by Wilson, D., Ruff, S., 206–207. Washington, D.C., Smithsonian Press, 1999.
- Perry, E.A.: The spotted seal, *Phoca largha*. In edited by Wilson, D., Ruff, S., 208–209. Washington, D.C., Smithsonian Press, 1999.
- Perry, E.A., Terhune, J.M.: Variation in harp seal underwater vocalizations among three breeding locations. *Journal of Zoology*, London 249: 181–186, 1999.
- Pessier, A.P., Nichols, D.K., Longcore, J.E., Fuller, M.S.: Cutaneous chytridiomycosis in poison dart frogs (*Dendrobates* spp.) and White's tree frogs (*Litoria caerulea*). *J Vet Diag. Inv.* 11: 194–199, 1999.
- Petit, L.J.: Prothonotary Warbler (*Protonotaria citrea*). In edited by Poole, A., Gill, F., p. 408. Philadelphia, The Birds of North America, Inc., 1999.
- Petit, L.J., Petit, D.R., Christian, D.G., Powell, H.D.W.: Bird communities of natural and modified habitats in Panama. *Ecography* 22: 292–304, 1999.
- Powell, D.M.: Preliminary evaluation of porcine zona pellucida (PZP) immunocontraception for behavioral effects in feral horses (*Equus caballus*). *Journal of Applied Animal Welfare Science* 2: 321–335, 1999.
- Pukazhenti, B.S., Pelican, K., Wildt, D.E., Howard, J.G.: Sensitivity of domestic cat (*Felis catus*) sperm from normospermic versus teratospermic donors to cold-induced acrosomal damage. *Biology of Reproduction* 61: 135–141, 1999.
- Rappole, J. H.: *Archilochus alexandri* species account. In del Hoyo, J., Elliott, A., and Sargatal, J. *Handbook of the Birds of the World*. 5, p. 672. Barcelona, Spain, Lynx Edicions. 1999.
- Rappole, J. H.: *Archilochus colubris* species account. In del Hoyo, J., Elliott, A., and Sargatal, J. *Handbook of the Birds of the World*. 5, 671–672. Barcelona, Spain, Lynx Edicions. 1999.
- Rappole, J.H.: The ocelot. In *The Smithsonian Book of North American Mammals*, edited by Wilson, D., Ruff, S., 228–229. Washington, D.C., Smithsonian Institution Press, 1999.
- Rappole, J.H., King, D.I., Barrow, W.C.: Winter ecology of the endangered golden-cheeked warbler. *The Condor* 101: 762–770, 1999.
- Rappole, J.H., Wemmer, C.: Birds, trees, and biodiversity in Myanmar. *Myanmar Forestry Journal* May: 1999.
- Richardson, D.S., Bolen, G.M.: A nesting association between semi-colonial Bullock's orioles and yellow-billed magpies: evidence for the predator protection hypothesis. *Behavioral Ecology and Sociobiology* 46:373–380, 1999.
- Richman, L.K., Montali, R.J., Cambre, R.C., Schmitt, D., Hardy, D., Garber, R.L., Hildebrandt, T., Fickel, J., Schaftenaar, W. and Hayward, G.S.: Clinical and Pathologic Aspects of a Fatal Herpesvirus Disease in Asian (*Elephas maximus*) and African (*Loxodonta africana*) Elephants. *AAZV Proceedings*, 263–265, 1999.
- Richman, L.K., Montali, R.J., Garber, R.L., Kennedy, M.A., Lehnhardt, J., Hildebrandt, T., Schmitt, D., Hardy, D., Alcendor, D.J., and Hayward, G.S.: Novel Endotheliotropic Herpesviruses Fatal for Asian and African Elephants. *Science*, 283:11171–11176, February 19, 1999.
- Richman, L.K., Montali, R.J., Hildebrandt, T.B., Fickel, J., Schmitt, D., and Hayward, G.S.: Status of a New, Fatal Herpesvirus Disease of Elephants in North America and Europe. *Verh. ber. Erkg. Zootiere* 39, 17–21, 1999.
- Richman, L., Montali, R., Hildebrandt, T., Fickel, J., and Hayward, G.: Une pathologie nouvellement identifiée chez l'éléphant associée à des herpesvirus endotheliotropes. *Virologie* 3(6):483–485, 1999.
- Ruiz-Miranda, C.R., Kleiman, D.G., Dietz, J.M., Moraes, E., Grativol, A.D., Baker, A.J., Beck, B.B.: Food transfers in wild and reintroduced golden lion tamarins, *Leontopithecus rosalia*. *American Journal of Primatology* 48: 305–320, 1999.
- Schaeff, C.M., Boness, D.J., Bowen D.J.: Female distribution, genetic relatedness, and fostering behaviour in harbour seals (*Phoca vitulina*). *Animal Behaviour* 57: 427–434, 1999.
- Schmitt, D.L., Hardy, D.G., Montali, R.J., Richman, L.K., Lindsay, W.A., and Isaza R.: Use of Fanciclovir for the Treatment of Herpesvirus in Asian Elephant. *Verh. ber. Erkg. Zootiere* 39, 23–25, 1999.
- Schwartz, M.K., Boness, D.J., Schaeff, C.M., Majluf, P.M., Perry, E.A., Fleischer, R.C.: Female solicited extra-pair matings in Humboldt penguins fail to produce extra-pair fertilizations. *Behavioral Ecology* 10: 242–250, 1999.
- Seidensticker, J.: The bears among us. *ZooGoer* 28: 8–11, 1999.
- Seidensticker, J.: A guide to Great Cats, Washington, D.C., Smithsonian National Zoological Park, 1999.
- Seidensticker, J.: Raccoon (*Procyon lotor*). In *The Smithsonian Book of North American Mammals*, edited by Wilson, D.E., Ruff, S., 221–223. Washington, D.C., Smithsonian Institution Press, 1999.
- Seidensticker, J.: Red fox (*Vulpes vulpes*). In *The Smithsonian Book of North American Mammals*, edited by Wilson, D.E., Ruff, S., 150–152. Washington, D.C., Smithsonian Institution Press, 1999.
- Seidensticker, J.: Review of Thoreau's Country: Journey Through a Transformed Landscape by David R. Foster. *ZooGoer* 28: 28–29, 1999.
- Seidensticker, J.: Sloth bears. *ZooGoer* 28: 18–25, 1999.
- Seidensticker, J., Christie, S., Jackson, P.: *Riding the Tiger: Tiger Conservation in Human-dominated Landscapes*. Cambridge, Massachusetts, Cambridge University Press, 1999.



- Shwe, N., Swe, T., Hnin, L., Win, H., Rappole, J.: Birds of Myanmar's North-Central Dry Zone, Front Royal, VA, Conservation and Research Center, 1999.
- Sorenson, M.D., Cooper, A., Paxinos, E.E., Quinn, T.W., James, H.F., Olson, S.L., Fleischer, R.C.: Relationships of the extinct moa-nalos, flightless Hawaiian waterfowl, based on ancient DNA. *Proceedings of the Royal Society, Series B* 266: 2187-2194, 1999.
- Spindler, R.E., Wildt, D.E.: Cat oocyte metabolism indicates fertilization and developmental potential. *Biology of Reproduction* 60: 269, 1999.
- Spindler, R.E., Wildt, D.E.: Circannual variations in intraovarian oocyte, but not epididymal sperm quality in the domestic cat. *Biology of Reproduction* 61: 188-194, 1999.
- Spindler, R.E., Wildt, D.E.: Metabolism as a marker of domestic cat oocyte maturation. *Theriogenology* 51: 295, 1999.
- Swanson, W. F., Howard, J. G., Davidson, J. L., and Brott, E. M.: Humoral immune response of endangered felids and mustelids to multiple treatments with exogenous gonadotropins for assisted reproduction. *Proc. Soc. Stud. Reprod., Biol. Reprod. Suppl.* 60, 193 (abstract 322). 1999.
- Swanson, W.F., Howard, J.G., Davidson, J.L., Brott, E.M.: Humoral immune response of endangered felids and mustelids to multiple treatments with exogenous gonadotropins for assisted reproduction. *Biology of Reproduction (Suppl.)* 60: 193, 1999.
- Tarr, C.L., Fleischer, R.C.: A molecular assessment of genetic variability and population differentiation in the endangered Mariana crow (*Corvus kubaryi*). *Molecular Ecology* 8: 942-949, 1999.
- Tarr, C.L., Fleischer, R.C.: Population boundaries and genetic diversity in the endangered Mariana crow (*Corvus kubaryi*). *Molecular Ecology* 8: 941-950, 1999.
- Terborgh, J., Estes, J.A., Paquet, P., Ralls, K., Boyd, D., Miller, B., Noss, R.: The role of top carnivores in regulating terrestrial ecosystems. In edited by Soule, M., Terborgh, J., 39-64. Washington, D.C., Island Press, 1999.
- Thompson, K.V., and Monfort, S.L.: Synchronization of estrous cycles in sable antelope. *Animal Reproduction Science* 57: 185-197, 1999.
- Vega Rivera, J.H., McShea, W.J., Rappole, J.H., Haas, C.A.: Postbreeding movements and habitat use of adult wood thrushes in Northern Virginia. *The Auk* 116: 458-466, 1999.
- Vila, C., Maldonado, J.E., Wayne, R.K.: Phylogenetic relationships, evolution and genetic diversity of the domestic dog. *Journal of Heredity* 90: 71-77, 1999.
- Visnak, R., Dumbacher, J.P.: Comparison of four fumigants for removing avian lice. *Journal of Field Ornithology* 70: 42-48, 1999.
- Wells, R.S., Boness, A., Rathbun, G.: Behavior. In edited by Reynolds, J.E., III, Rommel, S., 324-422. Washington, D.C., Smithsonian Institution Press, 1999.
- Whyte, A., Zhi-Cai, Y., Tiyanont, K., Weldon, P., Eisner, T., Meinwald, J.: Reptilian chemistry: characterization of dianeackerone, a secretory product from a crocodile. *PNAS* 96: 12246-12250, 1999.
- Wielebnowski, N.: Adrenal activity in relation to subjective temperament assessment in clouded leopards, *neofelis nebulosa*. In *Felid Taxonomy Advisory Group Action Plan*, edited by Wildt, D.E., Mellen, J.D., Brown, J.L., 74-75. Orlando, FL, Disney's Animal Kingdom, 1999.
- Wielebnowski, N.: Individual behavioral differences in captive cheetahs as predictors of breeding status. *Zoo Biology* 18: 335-349, 1999.
- Wildt, D.E., and Wemmer, C.: Sex and wildlife: the role of reproductive science in conservation. *Biodiversity and Conservation* 8: 965-976, 1999.
- Xiao, Lihua, Lillian Escalante, Chunfu Yang, Irshad Sulaiman, Anannias A. Escalante, Richard J. Montali, Ronald Fayer, and Altaf A. Lal: Phylogenetic Analysis of *Cryptosporidium* Parasites Based on the Small-Subunit rRNA Gene Locus. *Applied and Environmental Microbiology*: 1578-1583, April, 1999.
- Yang, Z., Whyte, A., Attygalle, A., Weldon, P., Eisner, T., Meinwald, J.: Reptilian chemistry: characterization of a family of dianeackerone-related steroidal esters from a crocodile secretion. *PNAS* 96: 12251-12256, 1999.
- Young, K.E.G.V., Snowden, K., Dobson, R.J., Powell, D., Craig, T.M.: Parasite diversity and antihelminthic resistance in two herds of horses. *Veterinary Parasitology* 85: 205-214, 1999.
- Zeman, David, Williams, Dayton and Montali, Richard J.: Necropsy Findings in a Black Rhinoceros (*Diceros bicornis*) Following an Acute Neurological Episode. *Wildlife Disease Association, South Dakota VMA 108<sup>th</sup> Annual Meeting Proceedings*, p. 121, August, 1999.

## Smithsonian Astrophysical Observatory

- Accomazzi, A., Eichhorn, G., Kurtz, M. J., Grant, C. S., and Murray, S. S. "The ADS Bibliographic Reference Resolver." In *Astronomical Data Analysis Software and Systems VIII, ASP Conference Series*, vol. 172, eds. D. M. Mehringer, R. L. Plante, and D. A. Roberts, p. 291. San Francisco: Astronomical Society of the Pacific, 1999.
- Acton, L. W., Bookbinder, J. A., Bruner, M. E., Golub, L., and Lemen, J. R. "Super-X: A Soft X-Ray Telescope for Solar-B." In *Missions to the Sun II, SPIE Proceedings*, vol. 3442, ed. M. Korendyke, p. 140. Bellingham, Washington: SPIE—The International Society for Optical Engineering, 1998.
- Alves, J., Hartmann, L., Briceno, C., and Lada, C. J. "Optical Outburst of a Young Star." In *Cool Stars, Stellar Systems and the Sun: Tenth Cambridge Workshop, ASP Conference Series*, vol. 154, eds. R. A. Donahue and J. A. Bookbinder, p. 1673. San Francisco: Astronomical Society of the Pacific, 1998.
- Apponi, A. J., McCarthy, M. C., Gottlieb, C. A., and Thaddeus, P. "Astronomical Detection of Rhomboidal SiC<sub>2</sub>." *Astrophysical Journal (Letters)* 516 (1999): L103.



- . “The Rotational Spectrum of Rhomboidal SiC<sub>3</sub>.” *Journal of Chemical Physics* 111 (1999): 3911.
- Argon, A. L., Greenhill, L. J., Moran, J. M., Reid, M. J., and Menten, K. M. “Proper Motions and the Distance to a Water Vapor Maser in the Galaxy M33.” In *Radio Emission from Galactic and Extragalactic Compact Sources, Proceedings of IAU Colloquium No. 164, ASP Conference Series*, vol. 144, eds. J. A. Zensus, G. B. Taylor, and J. M. Wrobel, p. 235. San Francisco: Astronomical Society of the Pacific, 1998.
- Auerhammer, J. M., Brandt, G., Scholze, F., Thornagel, R., Ulm, G., Wargelin, B. J., McDermott, W. C., Norton, T. J., Evans, I. N., and Kellogg, E. M. “High-Accuracy Calibration of the HXDS Flow-Proportional Counter for AXAF at the PTB Laboratory at BESSY.” In *X-Ray Optics, Instruments, and Missions, SPIE Proceedings*, vol. 3444, eds. R. B. Hoover and A. B. Walker, p. 19. Bellingham, Washington: SPIE—The International Society for Optical Engineering, 1998.
- Badran, H. M., Boyle, P. J., Fegan, D. J., Harris, K., Plouin, F., Pomerade, D., Fleury, P., Urban M., and Weekes, T. C. “A New Optical Filter for the ARTEMIS Experiment.” In *Proceedings of the 25th International Cosmic Ray Conference*, vol. 5, eds. M. S. Porgieter, B. C. Raubenheimer, and D. J. van der Walt, p. 185. Singapore: World Scientific, 1999.
- Balakrishnan, N., and Dalgarno, A. “Rate Coefficients for NO Formation in Energetic N + O<sub>2</sub> Collisions.” *Chemical Physics Letters* 302 (1999): 485.
- Balakrishnan, N., Esry, B. D., Sadeghpour, H. R., Cornett, S. T., and Cavagnero, M. J. “Quantum Wave-Packet Dynamics of the Photodissociation of LiF.” *Physical Review A* 60 (1999): 1407.
- Balakrishnan, N., Forrey, R. D., and Dalgarno, A. “Quantum-Mechanical Study of Ro-Vibrational Transitions in H<sub>2</sub> Induced by He Atoms.” *Astrophysical Journal* 514 (1999): 520.
- Balakrishnan, N., Kharchenko, V., and Dalgarno, A. “Slowing of Energetic O(<sup>3</sup>P) Atoms in Collisions with N<sub>2</sub>.” *Journal of Geophysical Research* 103(A10) (1998): 23393.
- . “Translational Energy Relaxation of Hot O(<sup>1</sup>D) Atoms.” *Journal of Physical Chemistry A* 103 (1999): 3999.
- Baliunas, S. L., Donahue, R. A., Soon, W., and Henry, G. W. “Activity Cycles in Lower Main Sequence and POST Main Sequence Stars: The HK Project.” In *Cool Stars, Stellar Systems and the Sun: Tenth Cambridge Workshop, ASP Conference Series*, vol. 154, eds. R. A. Donahue and J. A. Bookbinder, p. 153. San Francisco: Astronomical Society of the Pacific, 1998.
- Baliunas, S. L., and Soon, W. H. “An Assessment of the Sun-Climate Relation on Time Scales of Decades to Centuries: The Possibility of Total Irradiance Variations.” In *Solar Electromagnetic Radiation Study for Solar Cycle 22, Proceedings of the SOLERS22*, eds. J. M. Pap, C. Frohlich, and R. K. Ulrich, p. 401. Dordrecht: Kluwer Academic Publishers, 1998.
- . “Aerosols are Cool.” *World Climate Report* 4 (1999): 6.
- . “Cold World: Model Analysis Shows Icy Trend.” *World Climate Report* 4 (1998): 6.
- . “The Mysteries of Carbon Dioxide.” *World Climate Report* 4 (1999): 6.
- . “Silvery-Blue Cloudlets of the Night.” *World Climate Report* 4 (1999): 5.
- . “Pioneers in the Greenhouse Effect.” *World Climate Report* 4 (1999): 6.
- Ball, C. D., McCarthy, M. C., and Thaddeus, P. “Laser Spectroscopy of the Carbon Chains HC<sub>7</sub>H and HC<sub>9</sub>H.” *Astrophysical Journal (Letters)* 523 (1999): L89.
- Bally, J., Reipurth, B., Lada, C. J., and Billawalla, Y. “Multiple CO Outflows in Circinus: The Churning of a Molecular Cloud.” *Astronomical Journal* 117 (1999): 410.
- Barkana, R., Lehar, J., Falco, E. E., Grogin, N. A., Keeton, C. R., and Shapiro, I. I. “A Reassessment of the Data and Models of the Gravitational Lens Q0957+561.” *Astrophysical Journal* 520 (1999): 479.
- Barnes, S. A., Sofia, S., Prosser, C. F., and Stauffer, J. R. “Rotation Periods of Late-Type Stars in the Young Open Cluster IC 2602.” *Astrophysical Journal* 516 (1999): 263.
- Barrado y Navascués, D., Stauffer, J. R., and Patten, B. M. “The Lithium-Depletion Boundary and the Age of the Young Open Cluster IC 2391.” *Astrophysical Journal (Letters)* 522 (1999): L53.
- Beiersdorfer, P., Utter, S. B., Brown, G. V., Liedahl, D. A., Mauche, C. W., Kahn, S. M., Brickhouse, N. S., Dupree, A. K., Mewe, R., and Kaastra, J. S. “Spectral Catalogue of the Intermediate Ionization States of Iron in the Extreme Ultraviolet.” In *Laboratory Space Science Workshop*, p. 89. Cambridge, Massachusetts: Harvard-Smithsonian Center for Astrophysics, 1998.
- Bell, M. B., Feldman, P. A., Watson, J. K. G., McCarthy, M. C., Travers, M. J., Gottlieb, C. A., and Thaddeus, P. “Observations of Long C<sub>n</sub>H Molecules in the Dust Cloud TMC-1.” *Astrophysical Journal* 518 (1999): 740.
- Bergin, E. A., Neufeld, D. A., and Melnick, G. J. “Formation of Interstellar Ices Behind Shock Waves.” *Astrophysical Journal (Letters)* 510 (1999): L145.
- Bergin, E. A., Neufeld, D. A., Stauffer, J. R., Kleiner, S. C., Wang, Z., Plume, R., and Melnick, G. J. “Comet C/1999 H1 (Lee).” *IAU Circular No. 7183* (1999): 2.
- Bergin, E. A., Plume, R., Williams, J. P., and Myers, P. C. “The Ionization Fraction in Dense Molecular Gas. II. Massive Cores.” *Astrophysical Journal* (1999): 724.
- Biller, S. D., Breslin, A. C., Buckley, J., Caranese, M., Carson, M., Carter-Lewis, D. A., Cawley, M. F., Fegan, D. J., Finley, J. P., Gaidos, J. A., Hillas, A. M., Krennrich, F., Lamb, R. C., Lessard, R., Masterson, C., McEnery, J. E., McKernan, B., Moriarty, P., Quinn, J., Rose, H. J., Samuelson, F., Sembroski, G., Skelton, P., and Weekes, T. C. “Limits to Quantum Gravity Effects on Energy Dependence of the Speed of Light from Observations of TeV Flares in Active Galaxies.” *Physical Review Letters* 83 (1999): 2108.
- Bookbinder, J. A., Cheimets, P., Davis, W. R., Caldwell, D., Golub, L., and DeLuca, E. “HIREX: Results of the Mission Concept Study.” In *Missions to the Sun II, SPIE Proceedings*, vol. 3442, ed. C. M. Korendyke, p. 22.

- Bellingham, Washington: SPIE—The International Society for Optical Engineering, 1998.
- Boroson, B., Kallman, T., McCray, R., Vrtilik, S. D., and Raymond, J. "Models of X-Ray Photoionization in LMC X-4: Slices of a Stellar Wind." *Astrophysical Journal* 519 (1999): 191.
- Boyle, P. J., Buckley, J. H., Burdett, A. M., Bussons Gordo, J., Carter-Lewis, D. A., Catanese, M., Cawley, M. F., Fegan, D. J., Finley, J. P., Gaidos, J. A., Harris, K., Hillas, A. M., Krennrich, F., Lamb, R. C., Lessard, R., Masterson, C., McEnery, J. E., Mohanty, G., Moriarty, P., Quinn, J., Rodgers, A. J., Rose, H. J., Samuelson, F. W., Sembroski, G. H., Srinivasan, R., Weekes, T. C., and Zweerink, J. "Large Search for TeV Counterparts in Gamma Ray Bursts." In *Proceedings of the 25th International Cosmic Ray Conference*, vol. 3, eds. M. S. Potgieter, B. C. Raubenheimer, and D. J. van der Walt, p. 61. Singapore: World Scientific, 1999.
- Briceno, C., Calvet, N., Kenyon, S., and Hartmann, L. "A Large-Scale Objective-Prism and X-Ray Survey in Taurus-Auriga." *Astronomical Journal* 118 (1999): 1354.
- Briceno, C., Hartmann, L., and Stauffer, J. "New Very Low-Mass T-Tauri Stars in Taurus: Young Brown Dwarfs?" In *Cool Stars, Stellar Systems and the Sun: Tenth Cambridge Workshop*, ASP Conference Series, vol. 154, eds. R. A. Donahue and J. A. Bookbinder, p. 1846. San Francisco: Astronomical Society of the Pacific, 1998.
- Briceno, C., Hartmann, L., Stauffer, J., and Martin, E. L. "A Deep CCD Survey for Very Low-Mass Pre-Main Sequence Stars in Taurus." In *Brown Dwarfs and Extrasolar Planets*, ASP Conference Series, vol. 134, eds. R. Rebolo, E. L. Martin, and M. R. Zapatero Osorio, p. 36. San Francisco: Astronomical Society of the Pacific, 1998.
- Brickhouse, N. S. and Dupree, A. K. "EUVE Observations of 44 i Boo: Evidence for Localized Emission." In *Cool Stars, Stellar Systems and the Sun: Tenth Cambridge Workshop*, ASP Conference Series, vol. 154, eds. R. A. Donahue and J. A. Bookbinder, p. 993. San Francisco: Astronomical Society of the Pacific, 1998.
- Brown, D. S., Parnell, C., DeLuca, E., McMullen, R., and Golub, L. "Observed Magnetic Structure of X-Ray Bright Points from TRACE and MDI." In *Third Advances in Solar Physics Euroconference: Magnetic Fields and Oscillations*, ASP Conference Series, vol. 184, eds. B. Schmieder, A. Hofmann, and J. Staude, p. 81. San Francisco: Astronomical Society of the Pacific, 1999.
- Buckley, J. H., Akerlof, C. W., Biller, S., Boyle, P. J., Breslin, A. C., Carter-Lewis, D. A., Catanese, M., Cawley, M. F., Connaughton, V., Fegan, D. J., Finley, J. P., Gaidos, J., Gordo, J. B., Hillas, A. M., Krennrich, F., Lamb, R. C., Lessard, R., Masterson, C., McEnery, J. E., Mohanty, G., Moriarty, P., Quinn, J., Rodgers, A. J., Rose, H. J., Samuelson, F., Schubnell, M. S., Sembroski, G., Srinivasan, R., Weekes, T. C., Wilson, C., and Zweerink, J. "Gamma-Ray Variability of BL Lacs at  $E > 300$  GeV." *Advances in Space Research* 21 (1998): 101.
- Buckley, J. H., Boyle, P. J., Bradbury, S. M., Burdett, A. M., Bussons Gordo, J., Carter-Lewis, D. A., Catanese, M., Cawley, M. F., Fegan, D. J., Finley, J. P., Gaidos, J. A., Hillas, A. M., Krennrich, F., Lamb, R. C., Lessard, R., Masterson, C., McEnery, J. E., Mohanty, G., Quinn, J., Rodgers, A. J., Rose, H. J., Samuelson, F. W., Sembroski, G. H., Srinivasan, R., Weekes, T. C., and Zweerink, J. "A Search for TeV Emission from Unidentified Sources in the Galactic Plane." In *Proceedings of the 25th International Cosmic Ray Conference*, vol. 3, eds. M. S. Potgieter, B. C. Raubenheimer, and D. J. van der Walt, p. 237. Singapore: World Scientific, 1999.
- Cagnoni, I., Fruscione, A., and Papadakis, I. E. "Mrk421: EUVE Observations from 1994 to 1997." In *BL Lac Phenomenon*, ASP Conference Series, vol. 159, eds. L. O. Takalo and A. Sillanpää, p. 194. San Francisco: Astronomical Society of the Pacific, 1999.
- Callanan, P. J., Drake, J. J., and Fruscione, A. "An EUVE Observation of the Globular Cluster M15: The First Detection of a Low-Mass X-Ray Binary?" *Astrophysical Journal (Letters)* 521 (1999): L125.
- Carter-Lewis, D. A., Biller, S., Boyle, P. J., Buckley, J. H., Burdett, A. M., Bussons Gordo, J., Catanese, M., Cawley, M. F., Colombo, E., Fegan, D. J., Finley, J. P., Gaidos, J. A., Hillas, A. M., Krennrich, F., Lamb, R. C., Lessard, R., McEnery, J., Moriarty, P., Quinn, J., Rodgers, A., Rose, H. J., Samuelson, F. W., Sembroski, G. H., Srinivasan, R., Weekes, T. C., West, M., and Zweerink, J. "Spectrum of TeV Gamma Rays from the Crab Nebula." In *Proceedings of the 25th International Cosmic Ray Conference*, vol. 3, eds. M. S. Potgieter, B. C. Raubenheimer, and D. J. van der Walt, p. 161. Singapore: World Scientific, 1999.
- Catanese, M., Boyle, P. J., Burdett, A. M., Bussons Gordo, J., Buckley, J. H., Carter-Lewis, D. A., Cawley, M. F., Fegan, D. J., Finley, J. P., Gaidos, J. A., Hillas, A. M., Krennrich, F., Lamb, R. C., Lessard, R., Masterson, C., McEnery, J. E., Mohanty, G., Quinn, J., Rodgers, A. J., Rose, H. J., Samuelson, F. W., Sembroski, G. H., Srinivasan, R., Weekes, T. C., and Zweerink, J. "First Results from a Search for TeV Emission from BL Lacs Out to  $z=0.2$ ." In *Proceedings of the 25th International Cosmic Ray Conference*, vol. 3, eds. M. S. Potgieter, B. C. Raubenheimer, and D. J. van der Walt, p. 277. Singapore: World Scientific, 1999.
- Catanese, M., and Weekes, T. C. "Very High Energy Gamma Ray Astronomy." *Publications of the Astronomical Society of the Pacific* 111 (1999): 1193.
- Catanese, M., and The Whipple Collaboration. "Multi-Wavelength Observations of VHE BL Lac Objects." In *BL Lac Phenomenon*, ASP Conference Series, vol. 159, eds. L. O. Takalo and A. Sillanpää, p. 243. San Francisco: Astronomical Society of the Pacific, 1999.
- Chance, K. V., Spurr, R. J., and Kurosu, T. P. "Atmospheric Trace Gas Measurements from the European Space Agency's Global Ozone Monitoring Experiment." In *Satellite Remote Sensing of Clouds and the Atmosphere III*, SPIE Proceedings, vol. 3495, ed. J. E. Russell, p. 230.
- Bellingham, Washington: SPIE—The International Society for Optical Engineering, 1998.
- Charbonneau, D., Noyes, R. W., Korzennik, S. G., Nisenson, P., Jha, S., Vogt, S. S., and Kibrick, R. I. "An

- Upper Limit on the Reflected Light from the Planet Orbiting the Star Tau Bootis." *Astrophysical Journal (Letters)* 522 (1999): L145.
- Cheimets, P., Bookbinder, J. A., Davis, W. R., and Golub, L. "Novel Mirror Mount Design: TRACE Primary Mirror." In *EUV, X-Ray, and Gamma-Ray Instrumentation for Astronomy IX, SPIE Proceedings*, vol. 3445, eds. O. H. Siegmund and M. A. Gummin, p. 28. Bellingham, Washington: SPIE—The International Society for Optical Engineering, 1998.
- Cheimets, P., Bookbinder, J. A., DeLuca, E., Caldwell, D., Davis, W. R., and Golub, L. "Large-Area Thin Aluminum Filter Design, Handling, and Testing." In *EUV, X-Ray, and Gamma-Ray Instrumentation for Astronomy IX, SPIE Proceedings*, vol. 3445, eds. O. H. Siegmund and M. A. Gummin, p. 96. Bellingham, Washington: SPIE—The International Society for Optical Engineering, 1998.
- Chen, W., McCarthy, M. C., Novick, S. E., and Thaddeus, P. "Microwave Spectra of the Methylpolyynes  $\text{CH}_3(\text{C}^\circ\text{C})_6\text{H}$  and  $\text{CH}_3(\text{C}^\circ\text{C})_7\text{H}$ ." *Journal of Molecular Spectroscopy* 196 (1999): 335.
- Chen, W., Novick, S. E., McCarthy, M. C., and Thaddeus, P. "Microwave Spectroscopy of the 2,4-Pentadiynyl Radical:  $\text{H}_2\text{C}-\text{C}^\circ-\text{C}-\text{C}^\circ-\text{CH}$ ." *Journal of Chemical Physics* 109 (1998): 10190.
- Chisholm, J. R., Harnden, F. R., Schachter, J. F., Micela, G., Sciortino, S., and Favata, F. "ROSAT High Resolution Imager Identifications of Suspected Stellar Sources from the Einstein Slew Survey." *Astronomical Journal* 117 (1999): 1845.
- Chung, H., Kirby, K., and Babb, J. F. "Theoretical Study of the Absorption Spectra of the Lithium Dimer." *Physical Review A (Atomic, Molecular, and Optical Physics)* 60 (1999): 2002.
- Ciaravella, A., Raymond, J. C., Strachan, L., Thompson, B. J., Cyr, O. C. S., Gardner, L., Modigliani, A., Antonucci, E., Kohl, J., and Noci, G. "Ultraviolet and Optical Observations of a Coronal Transient with SOHO." *Astrophysical Journal* 510 (1999): 1053.
- Colbert, J. W., Malkan, M. A., Clegg, P. E., Cox, P., Fischer, J., Lord, S. D., Luhman, M., Satyapal, S., Smith, H. A., Spinoglio, L., Stacey, G., and Unger, S. J. "ISO LWS Spectroscopy of M82: A Unified Evolutionary Model." *Astrophysical Journal* 511 (1999): 721.
- Colley, W. N., and Schild, R. E. "Precision Photometry for Q0957+561 Images A and B." *Astrophysical Journal* 518 (1999): 153.
- Connaughton, V., Akerlof, C. W., Biller, S. D., Buckley, J. H., Carter-Lewis, D. A., Catanese, M., Cawley, M. F., Fegan, D. J., Gaidos, J. A., Hillas, A. M., Lamb, R. C., Lessard, R., McEnery, J., Mohanty, G., Porter, N. A., Quinn, J., Rose, H. J., Rovero, A. C., Samuelson, F., Schubnell, M. S., Sembroski, G., Srinivasan, R., Weekes, T. C., Wilson, C., and Zweerink, J. "A Search for TeV Gamma-Ray Bursts on a 1-Second Time-Scale." *Astroparticle Physics* 8 (1998): 179.
- Costantini, E., Comastri, A., Vignali, C., Fiore, F., and Giallongo, E. "BeppoSAX Observations of High-Redshift Quasars." *Memoire della Societa Astronomica Italiana* 70 (1999): 265.
- Côté, R., Dalgarno, A., Lyyra, A. M., and Li, L. "Observation of a Shape Resonance in the  $a^3\Sigma_u^+$  State of  $^7\text{Li}_2$ ." *Physical Review A* 60 (1999): 2063.
- Côté, R., and Kharchenko, V. "Quasicondensate Droplet Formation in a Gas of Trapped Atomic Hydrogen." *Physical Review Letters* 83 (1999): 2100.
- Coudé Du Foresto, V., Perrin, G., Mennesson, B., Mariotti, J. M., Traub, W., and Lacasse, M. "Morphological Changes in Giant and Supergiant M-Type Variable Stars: Interferometric Observations with FLUOR at IOTA." In *Pulsating Stars: Recent Developments in Theory and Observation, Proceedings of the Joint Discussion 24 of the 23rd General Assembly of the International Astronomical Union, Frontiers Series No. 23*, eds. M. Takeuti and D. D. Sasselov, p. 141. Tokyo: Universal Academic Press, 1998.
- Cranmer, S. R., Field, G. B., and Kohl, J. L. "Spectroscopic Constraints on Models of Ion-Cyclotron Resonance Heating in the Polar Solar Corona and Fast Solar Wind." *EOS Transactions* 79 (1998): 722.
- . "Spectroscopic Constraints on Models of Ion-Cyclotron Resonance Heating in the Polar Solar Corona." *Space Science Reviews* 87 (1999): 149.
- . "The Impact of Ion-Cyclotron Wave Dissipation on Heating and Accelerating the Fast Solar Wind." In *Solar Wind Nine, Proceedings of the Ninth International Solar Wind Conference, AIP Conference Proceedings*, vol. 471, eds. S. R. Habbal, R. Esser, J. V. Hollweg, and P. A. Isenberg, p. 35. Woodbury, New York: American Institute of Physics, 1999.
- . "Spectroscopic Constraints on Models of Ion-Cyclotron Resonance Heating in the Polar Solar Corona and High-Speed Solar Wind." *Astrophysical Journal* 518 (1999): 937.
- Cranmer, S. R., Kohl, J. L., and Noci, G. "UVCS/SOHO: The First Two Years." In *Solar Composition and Its Evolution—From Core to Corona, Proceedings of an ISSI Workshop*, eds. C. Frömlich, M. C. E. Huber, S. K. Solanki, and R. von Steiger, p. 341. Dordrecht: Kluwer Academic Publishers, 1998.
- Cranmer, S. R., Kohl, J. L., Noci, G., Antonucci, E., Tondello, G., Huber, M. C. E., Strachan, L., Panasyuk, A. V., Gardner, L. D., Romoli, M., Fineschi, S., Dobrzycka, D., Raymond, J. C., Nicolosi, P., Siegmund, O. H. W., Spadaro, D., Benna, C., Ciaravella, A., Giordano, S., Habbal, S. R., Karovska, M., Li, X., Martin, R., Michels, J. G., Modigliani, A., Naletto, G., O'Neal, R. H., Pernechele, C., Poletto, G., Smith, P. L., and Suleiman, R. M. "An Empirical Model of a Polar Coronal Hole at Solar Minimum." *Astrophysical Journal* 511 (1999): 481.
- Crosas, M., Wood, K., Sakamoto, K., Scoville, N. Z., Yun, M. S., Genzel, R., and Tacconi, L. J. "Disks in the Arp220 Nuclei: Modeling High Resolution Line and Continuum Observations." *Advances in Space Research* 23 (1999): 1057.
- D'Alessio, P., Cantó, J., Hartmann, L., Calvet, N., and Lizano, S. "On the Thermal Stability of Irradiation-Dominated Pre-

- Main-Sequence Disks." *Astrophysical Journal* 511 (1999): 896.
- David, L. P., Forman, W., and Jones, C. "ROSAT PSPC Observations of the Richest ( $R \geq 2$ ) ACO Clusters." *Astrophysical Journal* 519 (1999): 533.
- Derevianko, A., Johnson, W. R., Safronova, M. S., and Babb, J. F. "High-Precision Calculations of Dispersion Coefficients, Static Dipole Polarizabilities, and Atom-Wall Interaction Constants for Alkali-Metal Atoms." *Physical Review Letters* 82 (1999): 3589.
- Dewey, D., Drake, J. J., Edgar, R. J., Michaud, K., and Ratzlaff, P. "AXAF Grating Efficiency Measurements with Calibrated Nonimaging Detectors." In *X-Ray Optics, Instruments, and Missions, SPIE Proceedings*, vol. 3444, eds. R. B. Hoover and A. B. Walker, p. 48. Bellingham, Washington: SPIE—The International Society for Optical Engineering, 1998.
- DiFrancesco, J., Evans, N. J., Harvey, P. M., Mundy, L. G., and Butner, H. M. "High-Resolution Far-Infrared Studies of Intermediate-Mass Pre-Main-Sequence Objects." *Astrophysical Journal* 509 (1998): 324.
- DiStefano, R., and Scalzo, R. A. "A New Channel for the Detection of Planetary Systems Through Microlensing: I. Isolated Events Due to Planet Lenses." *Astrophysical Journal* 512 (1999): 564.
- . "A New Channel for the Detection of Planetary Systems Through Microlensing: II. Repeating Events." *Astrophysical Journal* 512 (1999): 579.
- Dobrzycka, D., Cranmer, S. R., Panasyuk, A. V., Strachan, L., and Kohl, J. L. "Study of the Latitudinal Dependence of H I Lyman  $\alpha$  and O VI Emission in the Solar Corona: Evidence for the Superradial Geometry of the Outflow in the Polar Coronal Holes." *Journal of Geophysical Research* 104 (1999): 9791.
- Dobrzycka, D., Panasyuk, A. V., Strachan, L., and Kohl, J. L. "Geometry, Physical Properties, and Outflow Velocities from the Polar and Equatorial Coronal Holes—UVCS/SOHO Observations." In *Solar Wind Nine. Proceedings of the Ninth International Solar Wind Conference, AIP Conference Proceedings*, vol. 471, eds. S. R. Habbal, R. Esser, J. V. Hollweg, and P. A. Isenberg, p. 305. Woodbury, New York: American Institute of Physics, 1999.
- . "Comparison of Polar and Equatorial Coronal Holes Observed by UVCS/SOHO: Geometry and Physical Properties." *Space Science Reviews* 87 (1999): 173.
- Dobrzycka, D., Strachan, L., Miralles, M. P., Kohl, J. L., Gardner, L. D., Smith, P., Guhathakurta, M., and Fisher, R. "Variation of Polar Coronal Hole Profiles with Solar Cycle." *Space Science Reviews* 87 (1999): 177.
- Donahue, R. A., and Bookbinder, J. A., eds. *Cool Stars, Stellar Systems and the Sun: Tenth Cambridge Workshop, ASP Conference Series*, vol. 154. San Francisco: Astronomical Society of the Pacific, 1998.
- Donnelly, R. H., Markevitch, M., Forman, W., Jones, C., Churazov, E., and Gilfanov, M. "A Hot SPOT in Coma." *Astrophysical Journal* 513 (1999): 690.
- Downes, D., Neri, R., Wiklind, T., Wilner, D. J., and Shaver, P. "Detection of CO(4–3), CO(9–8), and Dust Emission in the BAL Quasar APM 08279+5255 at a Redshift of 3.9." *Astrophysical Journal (Letters)* 513 (1998): L1.
- Drake, J., and Kashyap, V. "The Coronal Metallicity of the RS CVn Binary HR 1099." In *Cool Stars, Stellar Systems and the Sun: Tenth Cambridge Workshop, ASP Conference Series*, vol. 154, eds. R. A. Donahue and J. A. Bookbinder, p. 1040. San Francisco: Astronomical Society of the Pacific, 1998.
- Dupree, A. "Cool Stars: Imaging and Spectroscopy." In *Ultraviolet-Optical Space Astronomy Beyond HST, ASP Conference Series*, vol. 164, eds. J. A. Morse, J. M. Shull, and A. L. Kinney, p. 102. San Francisco: Astronomical Society of the Pacific, 1999.
- Dupree, A. K., Brickhouse, N. S., and Hurwitz, M. "ORFEUS Observations of Cool Stars: Electron Density Measurements." In *Cool Stars, Stellar Systems and the Sun: Tenth Cambridge Workshop, ASP Conference Series*, vol. 154, eds. R. A. Donahue and J. A. Bookbinder, p. 1022. San Francisco: Astronomical Society of the Pacific, 1998.
- Ebeling, H., Edge, A. C., Bohringer, H., Allen, S. W., Crawford, C. S., Fabian, A. C., Voges, W., and Huchra, J. P. "The ROSAT Brightest Cluster Sample (BCS) - I. The Compilation of the Sample and the Cluster log N-log S Distribution." *Monthly Notices of the Royal Astronomical Society* 301 (1998): 881.
- Eichhorn, G., Accomazzi, A., Kurtz, M. J., and Grant, C. S. "The Astrophysics Data System." In *Library and Information Services in Astronomy III (LISA III), ASP Conference Series*, vol. 153, eds. U. Grothkopf, H. Andernach, S. Stevens-Rayburn, and M. Gomez, p. 277. San Francisco: Astronomical Society of the Pacific, 1998.
- Eichhorn, G., Kurtz, M. J., Accomazzi, A., Grant, C. S., and Murray, S. S. "Connectivity in the Astronomy Digital Library through the ADS." In *Highlights of Astronomy*, vol. 11A, ed. J. Andersen, p. 516. Dordrecht: Kluwer Academic Publishers, 1998.
- Elsner, R. F., O'Dell, S. L., Ramsey, B. D., Tennant, A. F., Weisskopf, M. C., Kolodziejczak, J. J., Swartz, D. A., Engelhaupt, D. E., Garmire, G. P., Nousek, J. A., Bautz, M. W., Gaetz, T. J., and Zhao, P. "Calibration Results for the AXAF Flight Contamination Monitor." In *X-Ray Optics, Instruments, and Missions, SPIE Proceedings*, vol. 3444, eds. R. B. Hoover and A. B. Walker, p. 177. Bellingham, Washington: SPIE—The International Society for Optical Engineering, 1998.
- Esser, R., Fineschi, S., Dobrzycka, D., Habbal, S. R., Edgar, R. J., Raymond, J. C., Kohl, J. L., and Guhathakurta, M. "Plasma Properties in Coronal Holes Derived from Measurements of Minor Ion Spectral Lines and Polarized White Light Intensity." *Astrophysical Journal (Letters)* 510 (1999): L63.
- Falco, E. E., Kurtz, M. J., Geller, M. J., Huchra, J. P., Peters, J., Berlind, P., Mink, D. J., Tokarz, S. P., and Elwell, B. "The Updated Zwicky Catalog (UZC)." *Publications of the Astronomical Society of the Pacific* 111 (1999): 438.
- Fazio, G. G., Eisenhardt, P., and Huang, J. "The Space Infrared Facility (SIRTF): A New Probe for Study of the

- Birth and Evolution of Galaxies in the Early Universe." *Astrophysics and Space Science* 269 (1999): 541.
- Feldman, U., Laming, J. M., Doschek, G. A., Warren, H. P., and Golub, L. "On the Ability of an Extreme-Ultraviolet Multilayer Normal-Incidence Telescope to Provide Temperature Information for Solar Plasmas." *Astrophysical Journal (Letters)* 511 (1999): L61.
- Feldmeier, J. J., Brandt, W. N., Elvis, M., Fabian, A. C., Iwasawa, K., and Mathur, S. "Heavy and Complex X-Ray Absorption Toward the Nucleus of Markarian 6." *Astrophysical Journal* 510 (1999): 167.
- Field, G. B., Blackman, E. G., and Chou, H. "Nonlinear Alpha-Effect in Dynamo Theory." *Astrophysical Journal* 513 (1999): 638.
- Fineschi, S., Gardner, L. D., Kohl, J. L., Romoli, M., and Noci, G. C. "Grating Stray Light Analysis and Control in the UVCS/SOHO." In *X-Ray and Ultraviolet Spectroscopy and Polarimetry II, SPIE Proceedings*, vol. 3443, ed. S. Fineschi, p. 67. Bellingham, Washington: SPIE—The International Society for Optical Engineering, 1998.
- Finoguenov, A., Jones, C., Forman, W., and David, L. "Stellar Metallicities and Type IA Supernova Rates in the Early-Type Galaxy NGC 5846 from ROSAT and ASCA Observations." *Astrophysical Journal* 514 (1999): 844.
- Fiore, F., La Franca, F., Giommi, P., Elvis, M., Matt, G., Comastri, A., Molendi, S., and Gioia, I. "The Contribution of Faint Active Galactic Nuclei to the Hard X-Ray Background." *Monthly Notices of the Royal Astronomical Society* 306 (1999): L55.
- Fischer, J., Lord, S. D., Unger, S. J., Bradford, C. M., Brauher, J. R., Clegg, P. E., Colbert, J. W., Cox, P., Greenhouse, M. A., Harvey, V., Malkan, M. A., Melnick, G., Smith, H. A., Spinoglio, L., Strelitski, V., and Suter, J. P. "An LWS Spectroscopic Survey of Infrared Bright Galaxies." In *The Universe as Seen by ISO, ESA-SP 427*, vol. II, eds. P. Cox and M. F. Kessler, p. 817. Noordwijk: ESA Publications Division, 1999.
- Fischer, J., Luhman, M. L., Satyapal, S., Greenhouse, M. A., Stacey, G. J., Bradford, C. M., Lord, S. D., Brauher, J. R., Unger, S. J., Clegg, P. E., Smith, H. A., Melnick, G., Colbert, J. W., Malkan, M. A., Spinoglio, L., Cox, P., Harvey, V., Suter, J., and Strelitski, V. "ISO FAR-IR Spectroscopy of IR-Bright Galaxies and ULIRGs." *Astrophysics and Space Science* 266 (1999): 91.
- Fontenla, J., White, O. R., Fox, P. A., Avrett, E. H., and Kurucz, R. L. "Calculation of Solar Irradiances. I. Synthesis of the Solar Spectrum." *Astrophysical Journal* 518 (1999): 480.
- Ford, E. C., van der Klis, M., Mendez, M., van Paradijs, J., and Kaaret, P. "Measurement of Hard Lags and Coherences in the X-Ray Flux of Accreting Neutron Stars and Comparison with Accreting Black Holes." *Astrophysical Journal (Letters)* 512 (1998): L31.
- Forrey, R. C., Balakrishnan, N., and Dalgarno, A. "Quasi-resonant Energy Transfer in Ultracold Atom-Diatom Collisions." *Physical Review Letters* 82 (1999): 2657.
- Forrey, R. C., Balakrishnan, N., Kharchenko, V., and Dalgarno, A. "Feshbach Resonances in Ultracold Atom-Diatom Scattering." *Physical Review A* 58 (1998): 2645.
- Forrey, R. C., Kharchenko, V., Balakrishnan, N., and Dalgarno, A. "Vibrational Relaxation of Trapped Molecules." *Physical Review A* 59 (1999): 2146.
- Frazin, R. A., Ciaravella, A., Dennis, E., Fineschi, S., Gardner, L. D., Michels, J., O'Neal, R., Raymond, J. C., Wu, C., Kohl, J. L., Modigliani, A., and Noci, G. "UVCS/SOHO Ion Kinetics in Coronal Streamers." *Space Science Reviews* 87 (1999): 189.
- Frazin, R. A., Modigliani, A., Ciaravella, A., Dennis, E., Fineschi, S., Michels, L. D., Gardner, J., O'Neal, R., Raymond, J. C., Wu, C., Noci, G., and Kohl, J. L. "UVCS/SOHO Observations of Coronal Streamers." In *Solar Wind Nine, Proceedings of the Ninth International Solar Wind Conference, AIP Conference Proceedings*, vol. 471, eds. S. R. Habbal, R. Esser, J. V. Hollweg, and P. A. Isenberg, p. 235. Woodbury, New York: American Institute of Physics, 1999.
- Fuhr, J. R., Sugar, J., Reader, J., Kelleher, D. E., Olsen, K. J., Mohr, P. J., Dalton, G. R., Stern Grant, C., and Eichhorn, G. "NIST Atomic Spectra Database." In *Laboratory Space Science Workshop*, p. 169. Cambridge, Massachusetts: Harvard-Smithsonian Center for Astrophysics, 1998.
- García-Sánchez, J., Preston, R. A., Jones, D. L., Weissman, P. R., Lestrade, J., Latham, D. W., and Stefanik, R. P. "Stellar Encounters with the Oort Cloud Based on HIPPARCOS Data." *Astronomical Journal* 117 (1999): 1042; *Erratum. Astronomical Journal* 118 (1999): 600.
- . "A Search for Stars Passing Close to the Sun." In *Highlights of Astronomy*, vol. 11A, ed. J. Andersen, p. 575. Dordrecht: Kluwer Academic Publishers, 1998.
- Garnavich, P., Jha, S., Stanek, K., and Garcia, M. "GRB990123 Optical Observations." *GCN Circular* 215 (1999): 1.
- Garnavich, P. M., Stanek, K. Z., and Garcia, M. R. "GRB990506 Optical Observations." *GCN Circular* 302 (1999): 1.
- Geller, M. J., Diaferio, A., and Kurtz, M. J. "The Mass Profile of the Coma Galaxy Cluster." *Astrophysical Journal (Letters)* 517 (1999): L23.
- Gibson, B. K., Hughes, S. M. G., Stetson, P. B., Freedman, W. L., Kennicutt, R. C., Mould, J. R., Bresolin, F., Ferrarese, L., Ford, H. C., Graham, J. A., Han, M., Harding, P., Hoessel, J. G., Huchra, J. P., Illingworth, G. D., Kelson, D. D., Macri, L. M., Madore, B. F., Phelps, R. L., Prosser, C. F., Saha, A., Sakai, S., Sebo, K. M., Silbermann, N. A., and Turner, A. M. "The Hubble Space Telescope Key Project on the Extragalactic Distance Scale. XVII. The Cepheid Distance to NGC 4725." *Astrophysical Journal* 512 (1999): 48.
- Gillanders, G. G., Boyle, P. J., Buckley, J. H., Burdett, A. M., Bussons Gordo, J., Carter-Lewis, D. A., Catanese, M., Cawley, M. F., Fegan, D. J., Finley, J. P., Gaidos, J. A., Hillas, A. M., Krennrich, F., Lamb, R. C., Lang, M. J., Lessard, R., Masterson, C., McEnery, J. E., Mohanty, G.,

- Moriarty, P., Quinn, J., Rodgers, A. J., Rose, H. J., Samuelson, F. W., Sembroski, G. H., Srinivasan, R., Weekes, T. C., and Zweerink, J. "A Search for TeV Gamma-Ray Emission from the Crab Pulsar." In *Proceedings of the 25th International Cosmic Ray Conference*, vol. 3, eds. M. S. Potgieter, B. C. Raubenheimer, and D. J. van der Walt, p. 185. Singapore: World Scientific, 1999.
- Gingerich, O. "Adventures of a Coperican Sleuth." *AB Bookman's Weekly* 104 (1999): 559.
- . "The Arrogance of Mediocrity." In *God, Science & Humility: Ten Scientists Consider Humility Theology*, ed. R. Herrmann, p. 118. Philadelphia: Templeton Foundation, 1999.
- . "Carl Sagan." *Proceedings of the American Philosophical Society* 143 (1999): 713.
- . "The Future of Homo Sapiens." *Christian Century* 116 (1999): 1159.
- . "The Return of the Seagoing Cowboy." *American Scholar* 68 (1999): 71.
- . "Sacrobosco Illustrated." In *Between Demonstration and Imagination: Essays in the History of Science and Philosophy Presented to John D. North*, eds. L. Nauta and A. Vanderjagt, p. 211. Leiden: Brill, 1999.
- Girart, J., Ho, P. T. P., Rudolph, A. L., Estalella, R., Wilner, D. J., and Chernin, L. M. "The HCO<sup>+</sup> Molecular Outflow in NGC 2071." *Astrophysical Journal* 522 (1999): 921.
- Gladman, B., Kavelaars, J. J., Morbidelli, A., Holman, M., Petit, J., and Marsden, B. G. "1999 DZ7." *Minor Planet Electronic Circulars* 1999-J03 (1999).
- . "1999 DG8." In *Minor Planet Electronic Circulars* 1999-M30 (1999).
- . "1999 DD8." In *Minor Planet Electronic Circulars* 1999-L41 (1999).
- . "1999 DH8." In *Minor Planet Electronic Circulars* 1999-N10 (1999).
- . "1999 DB8." In *Minor Planet Electronic Circulars* 1999-K19 (1999).
- Golub, L., Bookbinder, J., DeLuca, E., Karovska, M., Warren, H., Schrijver, C. J., Shine, R., Tarbell, T., Title, A., Wolfson, J., Handy, B., and Kankelborg, C. "A New View of the Solar Corona from the Transition Region and Coronal Explorer (TRACE)." *Physics of Plasmas* 6 (1999): 2205.
- Gorenstein, P. "Deployable Ultra-High Throughput Telescope: Concept." In *Highlights in X-Ray Astronomy*, *MPE Report* 272, eds. B. Aschenbach and M. J. Freyberg, p. 361. Garching: Max-Planck-Institut für Extraterrestrische Physik, 1999.
- Gottlieb, C. A., McCarthy, M. C., Gordon, V. D., Chakan, J. M., Apponi, A. J., and Thaddeus, P. "Laboratory Detection of Two New C<sub>5</sub>H<sub>2</sub> Isomers." *Astrophysical Journal (Letters)* 509 (1998): L141.
- Gottlieb, C. A., McCarthy, M. C., Travers, M. J., Grabow, J., and Thaddeus, P. "Rotational Spectra of the Carbon Chain Free Radicals C<sub>10</sub>H, C<sub>12</sub>H, C<sub>13</sub>H, and C<sub>14</sub>H." *Journal of Chemical Physics* 109 (1998): 5433.
- Graessle, D. E., Blake, R. L., Burek, A. J., Dyson, S. E., Fitch, J. J., Schwartz, D. A., and Soufli, R. "Modeling of Synchrotron Reflectance Calibrations of AXAF Iridium-Coated Witness Mirrors over 2 to 12 keV." In *X-Ray Optics, Instruments, and Missions*, *SPIE Proceedings*, vol. 3444, eds. R. B. Hoover and A. B. Walker, p. 140. San Francisco: Astronomical Society of the Pacific, 1998.
- Graham, J. A., Ferrarese, L., Freedman, W. L., Kennicutt, R. C., Mould, J. R., Saha, A., Stetson, P. B., Madore, B. F., Bresolin, F., Ford, H. C., Gibson, B. K., Han, M., Hoessel, J. G., Huchra, J., Hughes, S. M., Illingworth, G. D., Kelson, D. D., Macri, L., Phelps, R., Sakai, S., Silbermann, N. A., and Turner, A. "The Hubble Space Telescope Key Project on the Extragalactic Distance Scale. XX. The Discovery of Cepheids in the Virgo Cluster Galaxy NGC 4548." *Astrophysical Journal* 516 (1999): 626.
- Greenhill, L. J., Gwinn, C. R., Schwartz, C., Moran, J. M., and Diamond, P. J. "Coexisting Conical Bipolar and Equatorial Outflows from a High-Mass Protostar." *Nature* 396 (1998): 650.
- Greiner, J., and DiStefano, R. "Relation Between Supersoft X-Ray Sources and VY Sci Stars." In *Highlights in X-Ray Astronomy*, *MPE Report* 272, eds. B. Aschenbach and M. J. Freyberg, p. 66. Garching: Max-Planck-Institut für Extraterrestrische Physik, 1999.
- Greiner, J., Tovmassian, G. H., DiStefano, R., Prestwich, A., González-Riestra, R., Szentasko, L., and Chavarría, C. "Transient Supersoft X-ray Emission from V 751 Cygni During the Optical Low-State." *Astronomy and Astrophysics* 343 (1999): 183.
- Grogin, N. A., Geller, M. J., and Huchra, J. P. "A Complete Redshift Survey to the Zwicky Catalog Limit in a 2<sup>h</sup> x 15 Region around 3C 273." *Astrophysical Journal Supplement Series* 119 (1998): 277.
- Guainazzi, M., Nicastro, F., Fiore, F., Matt, G., McHardy, I., Orr, A., Barr, P., Fruscione, A., Papadakis, I., Parmar, A. N., Uttley, P., Perola, G. C., and Piro, L. "A Swan Song: The Disappearance of the Nucleus of NGC 4051 and the Echo of Its Past Glory." *Monthly Notices of the Royal Astronomical Society* 301 (1998): L1.
- Gullbring, E., Hartmann, L., Briceno, C., Calvet, N., and Muzerolle, J. "Color Anomalies of Weak Lined T Tauri stars." In *Cool Stars, Stellar Systems and the Sun: Tenth Cambridge Workshop*, *ASP Conference Series*, vol. 154, eds. R. A. Donahue and J. A. Bookbinder, p. 1709. San Francisco: Astronomical Society of the Pacific, 1998.
- Habbal, S. R., Esser, R., Hollweg, J. V., and Isenberg, P. A., eds. "Solar Wind Nine." *Proceedings of the Ninth International Solar Wind Conference*, *AIP Conference Proceedings*, vol. 471. Woodbury, New York: American Institute of Physics, 1999.
- Handy, B. N., Acton, L. W., Kankelborg, C. C., Wolfson, C. J., Akin, D. J., Bruner, M. E., Carvalho, R., Catura, R. C., Chevalier, R., Duncan, D. W., Edwards, C. G., Feinstein, C. N., Freeland, S. L., Friedlaender, F. M., Hoffmann, C. H., Hurlburt, N. E., Jurcevich, B. K., Katz, N. L., Kelly, G. A., Lemen, J. R., Levay, M., Lindgren, R. W., Mathur, D. P., Meyer, S. B., Morrison, S. J., Morrison, M. D., Nightingale, R. W., Pope, T. P.,

- Rehse, R. A., Schrijver, C. J., Shine, R. A., Shing, L., Strong, K. T., Tarbell, T. D., Title, A. M., Torgerson, D. D., Golub, L., Bookbinder, J. A., Caldwell, D., Cheimets, P. N., Davis, W. N., DeLuca, E. E., McMullen, R. A., Warren, H. P., Amato, D., Fisher, R., Maldonado, H., and Parkinson, C. "The Transition Region and Coronal Explorer." *Solar Physics* 187 (1999): 229.
- Hardcastle, M. J., Worrall, D. M., and Birkinshaw, M. "Extended X-Ray Emission from the BL Lac Object PKS 0521-365." *Monthly Notices of the Royal Astronomical Society* 305 (1999): 246.
- Harris, D. E. "Some Lessons from ROSAT on the Physics of Radio Galaxies." In *Highlights in X-Ray Astronomy, MPE Report 272*, eds. B. Aschenbach and M. J. Freyberg, p. 178. Garching: Max-Planck-Institut für Extraterrestrische Physik, 1999.
- Harris, D. E., Silverman, J. D., Hasinger, G., and Lehmann, I. "Spatial Corrections of ROSAT HRI Observations." *Astronomy and Astrophysics Supplement Series* 133 (1998): 431.
- Harris, I. M., and Slane, P. O. "An Asca Study of the Supernova Remnant G39.2-0.3." *Astrophysical Journal* 516 (1998): 811.
- Herrnstein, J. R., Moran, J. M., Greenhill, L. J., Diamond, P. J., Inoue, M., Nakai, N., Miyoshi, M., Henkel, C., and Riess, A. "A Geometric Distance to the Galaxy NGC 4258 from Orbital Motions in a Nuclear Gas Disk." *Nature* 400 (1999): 539.
- Hicks, B. C., Rebbert, M., Isaacson, P., Ma, D., Marrian, C., Fischer, J., Smith, H., Ade, P., Sudiwala, R., Greenhouse, M., Moseley, H., and Steward, K. "Nanotechnology Fabrication of Polysilicon Film/Metal Grid Infrared Filters." In *Laboratory Space Science Workshop*, p. 145. Cambridge, Massachusetts: Harvard-Smithsonian Center for Astrophysics, 1998.
- Holman, M., Gladman, B., Kavelaars, J. J., Morbidelli, A., and Marsden, B. G. "1999 DA." *Minor Planet Electronic Circular* 1999-Do6 (1999): 6.
- Hooper, E., Wilkes, B., McLeod, K., Elvis, M., Impey, C., Lonsdale, C., Malkan, M., and McDowell, J. "The US Key Project on AGN Spectral Energy Distributions." In *The Universe as Seen by ISO, ESA-SP 427*, vol II, eds. P. Cox and M. F. Kessler, p. 893. Noordwijk: ESA Publications Division, 1999.
- Hooper, E., Wilkes, B., McLeod, K., McDowell, J., Elvis, M., Malkan, M., Lonsdale, C., and Impey, C. "The U. S. ISO Key Project on Quasars." In *Astrophysics with Infrared Surveys: A Prelude to SIRTf*, ASP Conference Series, vol. 177, eds. M. D. Bica, R. M. Cutri, and B. F. Madore, p. 153. San Francisco: Astronomical Society of the Pacific, 1999.
- Hora, J. L., and Deutsch, L. K. "The Spatial Distribution of Cool Dust in Planetary Nebulae." In *The Universe as Seen by ISO, ESA SP-427*, vol. I, eds. P. Cox and M. Kessler, p. 337. Noordwijk: ESA Publications Division, 1999.
- Horner, S. D., Brown, T. M., Kennelly, E. J., Kotak, R., Jha, S., Korzennik, S. G., Krockenberger, M., Nisenson, P., and Noyes, R. W. "51 Pegasi and Tau Bootis: Planets or Pulsations?" In *Cool Stars, Stellar Systems and the Sun: Tenth Cambridge Workshop, ASP Conference Series*, vol. 154, eds. R. A. Donahue and J. A. Bookbinder, p. 1860. San Francisco: Astronomical Society of the Pacific, 1998.
- . "51 Pegasi and Tau Bootis: Planets or Pulsations?" In *A Half Century of Stellar Pulsation Interpretation: A Tribute to Arthur N. Cox, ASP Conference Series*, vol. 135, eds. P. A. Bradley and J. A. Guzik, p. 206. San Francisco: Astronomical Society of the Pacific, 1998.
- Horner, S. D., Germain, M. E., Greene, T. P., Harris, F. H., Johnson, M. S., Johnson, K. J., Monet, D. G., Murison, M. A., Phillips, J. D., Reasenberg, R. D., Seidelmann, P. K., Urban, S. E., and Vassar, R. H. "The Full-Sky Astrometric Mapping Explorer—Astrometry for the New Millennium." In *Working on the Fringe: Optical and IR Interferometry from Ground and Space, ASP Conference Series*, vol. 194, eds. S. Unwin and R. Stachnik, p. 114. San Francisco: Astronomical Society of the Pacific, 1998.
- Huang, M., Bania, T. M., Bolatto, A., Chamberlin, R. A., Ingalls, J. G., Jackson, J. M., Lane, A. P., Stark, A. A., Wilson, R. W., and Wright, G. A. "Atomic Carbon Observations of Southern Hemisphere H II Regions." *Astrophysical Journal* 517 (1999): 282.
- Huchra, J. "Low Luminosity Galaxies in Large Surveys." In *The Low Surface Brightness Universe, Proceedings of IAU Colloquium No. 171, ASP Conference Series*, vol. 170, eds. J. I. Davies, C. D. Impey, and S. Phillips, p. 45. San Francisco: Astronomical Society of the Pacific, 1998.
- Huchra, J., Tollestrup, E., Schneider, S., Skrutski, M., Jarrett, T., Chester, T., and Cutri, R. "The 2Mass Redshift Surveys." In *Highlights of Astronomy*, vol. 11A, ed. J. Andersen, p. 487. Dordrecht: Kluwer Academic Publishers, 1998.
- Huchra, J. P., Vogeley, M. S., and Geller, M. J. "The CFA Redshift Survey: Data for the South Galactic CAP." *Astrophysical Journal Supplement Series* 121 (1999): 287.
- Hunter, T. R., Testi, L., Zhang, Q., and Sridharan, T. K. "Molecular Jets and H<sub>2</sub>O Masers in the AFGL 5142 Hot Core." *Astronomical Journal* 118 (1999): 477.
- Impey, C. D., Falco, E. E., Kochanek, C. S., Lehár, J., McLeod, B. A., Rix, H., Peng, C. Y., and Keeton, C. R. "An Infrared Einstein Ring in the Gravitational Lens PG 1115+080." *Astrophysical Journal* 509 (1998): 551.
- Ivan, A., Romaine, S. E., Bruni, R. J., Everett, J. E., and Gorenstein, P. "Characterization of Graded d-Spacing Multilayers for Hard X-Ray Telescopes." In *X-Ray Optics, Instruments, and Missions, SPIE Proceedings*, vol. 3444, eds. R. B. Hoover and A. B. Walker, p. 556. Bellingham, Washington: SPIE—The International Society for Optical Engineering, 1998.
- Jain, R., Bailyn, C., Garcia, M., Rines, K., Levine, A., Espinoza, J., and Gonzalez, D. "V1333 Aquilae." *IAU Circular No. 7161* (1999): 1.
- . "Optical Outburst of AQL X-1." *The Astronomer's Telegram* 41 (1999): 1.
- Jain, R., Bailyn, C., McClintock, J., Sobczak, G., Remillard, R., and Orosz, J. "XTE J1550-564." *IAU Circular No. 7114* (1999): 2.
- Janzen, P. H., Gardner, L. D., Reisenfeld, D. B., Savin, D. W., Kohl, J. L., and Bartschat, K. "Reevaluation of



- Experiments and New Theoretical Calculations for Electron-Impact Excitation of  $C^{3+}$ ." *Physical Review A* 59 (1999): 4821.
- Janzen, P. H., Reisenfeld, D. B., Gardner, L. D., and Kohl, J. L. "Absolute Cross Section for Electron Impact Excitation of Metastable  $Si^{2+}$ ." In *Laboratory Space Science Workshop*, p. 169. Cambridge, Massachusetts: Harvard-Smithsonian Center for Astrophysics, 1998.
- Jayawardhana, R., Hartmann, L., Fazio, G., Fisher, R. S., Telesco, C. M., and Pifia, R. K. "Mid-Infrared Imaging of the Young Binary Star HEN 3-600: Evidence for a Dust Disk around the Primary." *Astrophysical Journal (Letters)* 520 (1999): L41.
- . "A Disk Census for the Nearest Group of Young Stars: Mid-Infrared Observations of the TW Hydrae Association." *Astrophysical Journal (Letters)* 521 (1999): L129.
- Johnson, D. G., Jucks, K. W., Traub, W. A., Chance, K. V., Toon, G. C., Russell, J. M., and McCormick, M. P. "Stratospheric Age Spectra Derived from Observations of Water Vapor and Methane." *Journal of Geophysical Research* 104(D17) (1999): 21595.
- Johnson, L., Gilchrist, B., Estes, R. D., and Lorenzini, E. "Overview of Future NASA Tether Applications." *Advances in Space Research* 24 (1999): 1055.
- Jordan, C., Doschek, G. A., Drake, J. J., Galvin, A. B., and Raymond, J. C. "Coronal Abundances: What Are They?" In *Cool Stars, Stellar Systems and the Sun: Tenth Cambridge Workshop, ASP Conference Series*, vol. 154, eds. R. A. Donahue and J. A. Bookbinder, p. 91. San Francisco: Astronomical Society of the Pacific, 1998.
- Jucks, K. W., Johnson, D. G., Chance, K. V., Traub, W. A., Margitan, J. J., Osterman, G. B., Salawitch, R. J., and Sasano, Y. "Observations of OH, HO<sub>2</sub>, H<sub>2</sub>O, and O<sub>3</sub> in the Upper Stratosphere: Implications for HO<sub>x</sub> Photochemistry." *Geophysical Research Letters* 25 (1998): 3935.
- Kalkofen, W., Ulmschneider, P., and Avrett, E. H. "Does the Sun Have a Full-Time Chromosphere?" *Astrophysical Journal (Letters)* 521 (1999): L141.
- Kalogera, V. "Kinematics of Low-Mass X-Ray Binaries and MS Pulsars." In *Neutron Stars and Pulsars: Thirty Years after the Discovery. Frontiers Science Series No. 24*, eds. N. Shibasaki, N. Kawai, S. Shibata, and T. Kifune, p. 27. Tokyo, Japan: Universal Academy Press, 1998.
- Kaluzny, J., Mochejska, B. J., Stanek, K. Z., Krockenberger, M., Sasselov, D. D., Tonry, J. L., and Mateo, M. "DIRECT Distances to Nearby Galaxies Using Detached Eclipsing Binaries and Cepheids. IV. Variables in the Field M31D." *Astronomical Journal* 118 (1999): 346.
- Kamoun, P., Campbell, D., Pettengill, G., and Shapiro, I. "Radar Observations of Three Comets and Echoes from One: Detection of P/Grigg-Skjellerup." *Planetary and Space Science* 47 (1999): 23.
- Kaper, L., Henrichs, H. F., Nichols, J. S., and Telting, J. H. "Long- and Short-Term Variability in O-Star Winds II. Quantitative Analysis of DAC Behaviour." *Astronomy and Astrophysics* 344 (1999): 231.
- Karovska, M. "Fifteen Years of High Angular Resolution Studies of Mira's Atmosphere." In *Asymptotic Giant Branch Stars, Proceedings of IAU Symposium No. 191*, eds. T. Leberste, A. Lèbre, and C. Waelkens, p. 139. San Francisco: Astronomical Society of the Pacific, 1999.
- Kash, M. M., Sautenkov, V. A., Zibrov, A. S., Hollberg, L., Welch, G. R., Lukin, M. D., Rostovtsey, Y., Fry, E. S., and Scully, M. O. "Ultraslow Group Velocity and Enhanced Nonlinear Optical Effects in a Coherently Driven Hot Atomic Gas." *Physical Review Letters* 82 (1999): 5229.
- Kashyap, V., and Drake, J. "DEM Reconstruction: A Markov-Chain Monte-Carlo Approach." In *Cool Stars, Stellar Systems and the Sun: Tenth Cambridge Workshop, ASP Conference Series*, vol. 154, eds. R. A. Donahue and J. A. Bookbinder, p. 844. San Francisco: Astronomical Society of the Pacific, 1998.
- Kavelaars, J. J., Gladman, B., Holman, M., Petit, J., Scholl, H., and Marsden, B. G. "Probable New Satellites of Uranus." In *IAU Circular No. 7230* (1999): 1.
- Kawamura, J. H., Hunter, T. R., Tong, C. E., Blundell, R., Zhang, Q., Katz, C. A., Papa, D. C., and Sridharan, T. K. "First Image with the CfA Superconductive HEB Receiver: The Protostellar Outflow from IRAS 20126+4104 in CO (J=7-6)." *Publications of the Astronomical Society of the Pacific* 111 (1999): 1088.
- Kelson, D. D., Illingworth, G. D., Saha, A., Graham, J. A., Stetson, P. B., Freedman, W. L., Kennicutt, R. C., Mould, J. R., Ferrarese, L., Huchra, J. P., Madore, B. F., Prosser, C. E., Bresolin, F., Ford, H. C., Gibson, B. K., Hoessel, J. G., Hughes, S. M. G., Macri, L. M., Sakai, S., and Silbermann, N. A. "The Hubble Space Telescope Key Project on the Extragalactic Distance Scale. XIX. The Discovery of Cepheids in and a New Distance to NGC 3198." *Astrophysical Journal* 514 (1999): 614.
- Kennelly, E. J., Brown, T. M., Ehrenfreund, P., Foing, B., Hao, J., Horner, S., Korzennik, S., Nisenson, P., Noyes, R., and Sontnertrucker, P. "Doppler Imaging of Stellar Oscillations: Multi-Site Observations of Epsilon Cephei." In *Precise Stellar Radial Velocities, Proceedings of IAU Colloquium No. 170, ASP Conference Series*, vol. 185, eds. J. B. Hearnshaw and C. D. Scarfe, p. 264. San Francisco: Astronomical Society of the Pacific, 1999.
- Kenyon, S. J. "Accretion Disks and Eruptive Phenomena." In *The Origin of Stars and Planetary Systems, Proceedings of NATO Advanced Study Institute on the Physics of Star Formation and Early Evolution—II*, eds. C. J. Lada and N. D. Kylafis, p. 613. Dordrecht: Kluwer Academic Publishers, 1999.
- Kervella, P., Coudé Du Foresto, V., Traub, W. A., and Lacasse, M. G. A. "Interferometric Observations of the Cepheid  $\zeta$  Geminorum with FLUOR / IOTA." In *Working on the Fringe: Optical and IR Interferometry from Ground and Space, ASP Conference Series*, vol. 194, eds. S. Unwin and R. Stachnik, p. 22. San Francisco: Astronomical Society of the Pacific, 1999.
- Keto, E., Hora, J. L., Fazio, G. G., Hoffmann, W., and Deutsch, L. "A Super-Star Cluster in NGC 253: Mid-Infrared Properties." *Astrophysical Journal (Letters)* 518 (1999): L183.



- Kharchenko, V., Liu, W., and Dalgarno, A. "X Ray and EUV Emission Spectra of Oxygen Ions Precipitating into the Jovian Atmosphere." *Journal of Geophysical Research* 103(A11) (1998): 26687.
- Kim, D., and Elvis, M. "Radio-Quiet Red Quasars." *Astrophysical Journal* 516 (1999): 9.
- Kleyna, J., Geller, M., Kenyon, S., and Kurtz, M. "Measuring the Dark Matter Scale of Local Group Dwarf Spheroidals." *Astronomical Journal* 117 (1999): 1275.
- Knapp, G. R., Dobrovolsky, S. I., Ivezić, Z., Young, K., Crosas, M., Mattei, J. A., and Rupen, M. P. "The Light Curve and Evolutionary Status of the Carbon Star V Hya." *Astronomy and Astrophysics* 351 (1999): 97.
- Knapp, G. R., Young, K., and Crosas, M. "The Circumstellar Envelope of  $\pi$  (1) Gru." *Astronomy and Astrophysics* 346 (1999): 175.
- Ko, Y., Galvin, A. B., Gibson, S., and Strachan, L. "The Electron Temperature Profile in the North Polar Coronal Hole During the WSM Inferred by SWICS/Ulysses, LASCO and UVCS Data." *EOS Transactions* 79 (1998): 283.
- Kochanek, C. S., Falco, E. E., Impey, C. D., Lehar, J., McLeod, B. A., and Rix, H. "Results from the CASTLES Survey of Gravitational Lenses." In *After the Dark Ages: When Galaxies were Young (the Universe at  $2 \ll z \ll 5$ )*, AIP Conference Proceedings, vol. 470, eds. S. Holt and E. Smith, p. 163. Woodbury, New York: American Institute of Physics, 1999.
- Kohl, J. H., and Cranmer, S. R., eds. *Coronal Holes and Solar Wind Acceleration, Proceedings of SOHO 7 Workshop*. Dordrecht: Kluwer Academic Publishers, 1999.
- . "Foreword." *Space Science Reviews* 87 (1999): 9.
- Kohl, J. L., Esser, R., Cranmer, S. R., Fineschi, S., Gardner, L. D., Panasyuk, A. V., Strachan, L., Suleiman, R. M., Frazin, R. A., and Noci, G. "EUV Spectral Line Profiles in Polar Coronal Holes from 1.3 to 3.0  $R_{\odot}$ ." *Astrophysical Journal (Letters)* 510 (1999): L59.
- Kohl, J. L., Fineschi, S., Esser, R., Ciaravella, A., Cranmer, S. R., Gardner, L. D., Suleiman, R., Noci, G., and Modigliani, A. "UVCS/SOHO Observations of Spectral Line Profiles in Polar Coronal Holes." *Space Science Reviews* 87 (1999): 233.
- Kohl, J. L., Gardner, L. D., Strachan, L., Miralles, M. P., Smith, P. L., Suleiman, R., and Dobrzycka, D. "SOHO/Spartan 201 Coordinated Observations." *EOS Transactions* 80, (1999): 263.
- Korzennik, S. G., Brown, T. M., Contos, A. R., Horner, S., Jha, S., Kennelly, T., Krockenberger, M., Nisenson, P., and Noyes, R. W. "Exoplanet Research with the Advanced Fiber Optic Echelle." In *Cool Stars, Stellar Systems and the Sun: Tenth Cambridge Workshop, ASP Conference Series*, vol. 154, eds. R. A. Donahue and J. A. Bookbinder, p. 1876. San Francisco: Astronomical Society of the Pacific, 1998.
- Kraemer, K. E., Deutsch, L. K., Jackson, J. M., Hora, J. L., Fazio, G. G., Hoffmann, W. F., and Dayal, A. "The Mid-Infrared Properties of Three Star-forming Sites in NGC 6334." *Astrophysical Journal* 516 (1999): 817.
- Krennrich, F., Biller, S. D., Bond, I. H., Boyle, P. J., Bradbury, S. M., Breslin, A. C., Buckley, J. H., Burdett, A. M., Gordo, J. B., Carter-Lewis, D. A., Catanese, M., Cawley, M. F., Fegan, D. J., Finley, J. P., Gaidos, J. A., Hall, T., Hillas, A. M., Lamb, R. C., Lessard, R. W., Masterson, C., McEnery, J. E., Mohanty, G., Moriarty, P., Quinn, J., Rodgers, A. J., Rose, H. J., Samuelson, F. W., Sembroski, G. H., Srinivasan, R., Vassiliev, V. V., and Weekes, T. C. "Measurement of the Multi-TeV Gamma-Ray Flare Spectra of Markarian 421 and Markarian 501." *Astrophysical Journal* 511 (1999): 149.
- Krockenberger, M., Sasselov, D., Noyes, R., Korzennik, S., Nisenson, P., Brown, T., Kennelly, T., and Horner, S. "Temperatures of Cepheids from Line-Depth Ratios." In *Cool Stars, Stellar Systems and the Sun: Tenth Cambridge Workshop, ASP Conference Series*, vol. 154, eds. R. A. Donahue and J. A. Bookbinder, p. 791. San Francisco: Astronomical Society of the Pacific, 1998.
- Kuraszkiewicz, J., Wilkes, B. J., Green, P. J., Mathur, S., and McDowell, J. C. "SEDs vs. Emission-Line Correlations in Low-Redshift Quasars." In *Structure and Kinematics of Quasar Broad Line Regions, ASP Conference Series*, vol. 175, eds. C. M. Gaskell, W. N. Brandt, M. Dietrich, D. Dultzin-Hacyan, and M. Eracleous, p. 235. San Francisco: Astronomical Society of the Pacific, 1999.
- Kuraszkiewicz, J., Wilkes, B. J., Green, P. J., Mathur, S., McDowell, J., and Czerny, B. "SEDs vs. Emission-Line Correlations in Low Redshift Quasars." In *Quasars and Cosmology, ASP Conference Series*, vol. 162, eds. G. Ferland and J. Baldwin, p. 325. San Francisco: Astronomical Society of the Pacific, 1999.
- Kurosu, T. P., Chance, K. V., and Spurr, R. J. "Cloud Retrieval Algorithm for the European Space Agency's Global Ozone Monitoring Experiment." In *Satellite Remote Sensing of Clouds and the Atmosphere III, SPIE Proceedings*, vol. 3495, ed. J. E. Russell, p. 17. Bellingham, Washington: SPIE—The International Society for Optical Engineering, 1998.
- Kurtz, M. J. and Eichhorn, G. "The Historical Literature of Astronomy, via ADS." In *Library and Information Services in Astronomy III (LISA III), ASP Conference Series*, vol. 153, eds. U. Grothkopf, H. Andernach, S. Stevens-Rayburn, and M. Gomez, p. 293. San Francisco: Astronomical Society of the Pacific, 1998.
- Lada, C. J. "The Formation of Low Mass Stars: An Observational Overview." In *The Origins of Stars and Planetary Systems: Proceedings of NATO Advanced Study Institute on the Physics of Star Formation and Early Evolution—II*, eds. C. J. Lada and N. D. Kylafis, p. 143. Dordrecht: Kluwer Academic Publishers, 1999.
- Lada, C. J., and Kylafis, N. D., eds. *The Origins of Stars and Planetary Systems: Proceedings of NATO Advanced Study Institute on the Physics of Star Formation and Early Evolution—II*. Dordrecht: Kluwer Academic Publishers, 1999.
- Lada, E. A., Lada, C. J., and Muench, A. "Infrared Luminosity Functions of Embedded Clusters." In *The Stellar Initial Mass Function (38th Herstmonceux Conference), ASP Conference Series*, vol. 142, eds. G.

- Gilmore and D. Howell, p. 107. San Francisco: Astronomical Society of the Pacific, 1998.
- Lamb, F. K., Miller, M. C., and Psaltis, D. "The Origin of Kilohertz QPOs and Implications for Neutron Stars." In *Neutron Stars and Pulsars: Thirty Years after the Discovery*, *Frontiers Science Series No. 24*, eds. N. Shibasaki, N. Kawai, S. Shibata, and T. Kifune, p. 89. Tokyo, Japan: Universal Academy Press, 1998.
- Lanza, R. P., Arrow, K. J., Axelrod, J., Baltimore, D., Benacerraf, B., Bloch, K. E., Bloembergen, N., Brown, H. C., Brown, M. S., Cibelli, J. B., Cohen, S., Cooper, L. N., Corey, E. J., Dulbecco, R., Fischer, E. H., Fitch, V. L., Friedman, J. I., Friedman, M., Furchgott, R. F., Gellmann, M., Glaser, D. A., Glashow, S. L., Gilbert, W., Goldstein, J. L., Gould, S. J., Guillemin, R., Hauptman, H. A., Herschbach, D., Hoffman, R., Hood, L., Huble, D. H., Karle, J., Klein, L. R., Kohn, W., Kornberg, A., Krebs, E. G., Lederman, L. M., Lederberg, J., Lee, D. M., Lucas, R. E., Jr., Marcus, R. A., Merrifield, R. B., Miller, M. H., Modigliani, F., Molina, M. J., Mullis, K., Murad, F., Murray, J. E., Nathans, D., Nirenberg, M. W., North D. C., Olah, G. A., Palade, G. E., Perl, M. J., Ramsey, N. F., Richter, B., Roberts, R. J., Robl, J. M., Samuelson, P. A., Schwartz, M., Sharp, P. A., Smalley, R. E., Smith, H. O., Solow, R. M., Taube, H., Tonegawa, S., Watson, J. D., Weinberg, S., Weller, T. H., West, M. D., Wieschaus, E. F., Wiesel, T. N., and Wilson, R. W. "Science Over Politics." *Science* 283 (1999): 1849.
- Latham, D. W. "The Search for Extrasolar Planets from Space at Optical and Ultraviolet Wavelengths." In *Ultraviolet-Optical Space Astronomy beyond HST*, *ASP Conference Series*, vol. 164, eds. J. A. Morse, J. M. Shull, and A. L. Kinney, p. 134. San Francisco: Astronomical Society of the Pacific, 1999.
- Lebach, D. E., Ratner, M. I., Shapiro, I. I., Ransom, R. R., Bietenholz, M. F., Bartel, N., and Lestrade, J. "Milliarcsecond Change of IM Pegasi Radio Position in 1 Hour Coincident with Sharp Rise in Flux Density." *Astrophysical Journal (Letters)* 517 (1999): L43.
- Lenz, D. D., DeLuca, E. E., Golub, L., Rosner, R., and Bookbinder, J. A. "Temperature and Emission-Measure Profiles along Long-Lived Solar Coronal Loops Observed with the Transition Region and Coronal Explorer." *Astrophysical Journal (Letters)* 517 (1999): L155.
- Lessard, R., Boyle, P. J., Buckley, J. H., Bradbury, S. M., Burdett, A. M., Bussons Gordo, J., Carter-Lewis, D. A., Caranese, M., Cawley, M. F., Fegan, D. J., Finley, J. P., Gaidos, J. A., Hillas, A. M., Krennrich, F., Lamb, R. C., Masterson, C., McEnery, J. E., Mohanty, G., Moriarty, P., Quinn, J., Rodgers, A. J., Rose, H. J., Samuelson, F. W., Sembroski, G. H., Srinivasan, R., Weekes, T. C., and Zweerink, J. "Constraints on Cosmic-Ray Origin Theories from TeV Gamma-Ray Observations." In *Proceedings of the 25th International Cosmic Ray Conference*, vol. 3, eds. M. S. Potgieter, B. C. Raubenheimer, and D. J. van der Walt, p. 233. Singapore: World Scientific, 1999.
- Leviton, D. B., Gardner, L. D., Fineschi, S., Jhabvala, M. D., Kohl, J. L., Romoli, M., and Noci, G. C. "White-Light Stray Light Test of the SOHO UVCS." In *X-Ray and Ultraviolet Spectroscopy and Polarimetry II*, *SPIE Proceedings*, vol. 3443, ed. S. Fineschi, p. 50. Bellingham, Washington: SPIE—The International Society for Optical Engineering, 1998.
- Li, X., Habbal, S. R., Hollweg, J. V., and Esser, R. "Heating and Cooling of Protons by Turbulence-Driven Ion Cyclotron Waves in the Fast Solar Wind." *Journal of Geophysical Research* 104 (1999): 2521.
- Lisse, C. M., Fernández, Y. R., Kundu, A., A'Hearn, M. F., Dayal, A., Deutsch, L. K., Fazio, G. G., Hora, J. L., and Hoffmann, W. F. "The Nucleus of Comet Hyakutake (C/1996 B2)." *Icarus* 140 (1999): 189.
- Lo, K. Y., Shen, Z., Zhao, J., and Ho, P. T. P. "Intrinsic Size and Shape of SGR A : 3.6 AU by 1 AU." In *The Central Parsecs of the Galaxy*, *ASP Conference Series*, vol. 186, eds. H. Falcke, A. Cotera, W. J. Duschl, F. Melia, and M. J. Rieke, p. 72. San Francisco: Astronomical Society of the Pacific, 1999.
- Luhman, K. L., Rieke, G. H., Briceno, C., Liebert, J., and Hartmann, L. "Spectroscopic Observations of Young Brown Dwarf Candidates." In *Cool Stars, Stellar Systems and the Sun: Tenth Cambridge Workshop*, *ASP Conference Series*, vol. 154, eds. R. A. Donahue and J. A. Bookbinder, p. 1887. San Francisco: Astronomical Society of the Pacific, 1998.
- Lukin, M. D., Matsko, A. B., Fleischauer, M., and Scully, M. O. "Quantum Noise and Correlations in Resonantly Enhanced Wave Mixing Based on Atomic Coherence." *Physical Review Letters* 82 (1999): 1847.
- Lukin, M. D., Yelin, S. F., Zibrov, A. S., and Scully, M. O. "Enhancement of Refractive Index with Quantum Coherence: An Overview." *Laser Physics* 9 (1999): 1.
- Maccari, L., Noci, G., Modigliani, A., Romoli, M., Fineschi, S., and Kohl, J. L. "Ly- $\alpha$  Observation of a Coronal Streamer with UVCS/SOHO." *Space Science Reviews* 87 (1999): 265.
- Macri, L. M., Huchra, J. P., Stetson, P. B., Silbermann, N. A., Freedman, W. L., Kennicutt, R. C., Mould, J. R., Madore, B. F., Bresolin, F., Ferrarese, L., Ford, H. C., Graham, J. A., Gibson, B. K., Han, M., Harding, P., Hill, R. J., Hoessel, J. G., Hughes, S. M. G., Kelson, D. D., Illingworth, G. D., Phelps, R. L., Prosser, C. F., Rawson, D. M., Saha, A., Sakai, S., and Turner, A. "The Extragalactic Distance Scale Key Project. XVIII. The Discovery of Cepheids and a New Distance to NGC 4535 Using the Hubble Space Telescope." *Astrophysical Journal* 521 (1999): 155.
- Madore, B. F., Freedman, W. L., Silbermann, N., Harding, P., Huchra, J., Mould, J., Graham, J., Ferrarese, L., Gibson, B., Han, M., Hoessel, J., Hughes, S., Illingworth, G., Phelps, R., Sakai, S., and Stetson, P. "The Hubble Space Telescope Key Project on the Extragalactic Distance Scale. XV. A Cepheid Distance to the Fornax Cluster and Its Implications." *Astrophysical Journal* 515 (1999): 29.
- Magnier, E. A., Waters, L. B. F. M., Groot, P. J., van den Ancker, M. E., Kuan, Y., and Martín, E. L. "The Circumstellar Environment of IRAS 05327+3404." *Astronomy and Astrophysics* 346 (1999): 441.

- Magri, C., Ostro, S. J., Rosema, K. D., Thomas, M. L., Mitchell, D. L., Campbell, D. B., Chandler, J. F., Shapiro, I. I., Giorgini, J. D., and Yeomans, D. K. "Mainbelt Asteroids: Results of Arecibo and Goldstone Radar Observations of 37 Objects during 1980–1995." *Icarus* 140 (1999): 379.
- Mahdavi, A., Geller, M. J., Boehringer, H., Kurtz, M. J., and Ramella, M. "The Dynamics of Poor Systems of Galaxies." *Astrophysical Journal* 518 (1999): 69.
- Mair, R. W., Wong, G., Hoffmann, D., Patz, S., Hurlimann, M., Schwartz, L., and Walsworth, R. L. "Time-Dependent Noble Gas Diffusion NMR in Porous Media and Implications for Lung Study." In *Proceedings of the Seventh Scientific Meeting of the International Society for Magnetic Resonance in Medicine*, p. 1799. Philadelphia: 1999.
- Maraschi, L., Fossati, G., Tavecchio, F., Chiappetti, L., Celotti, A., Ghisellini, G., Grandi, P., Pian, E., Tagliaferri, G., Treves, A., Breslin, A. C., Buckley, J. H., Carter-Lewis, D. A., Catanese, M., Cawley, M. F., Fegan, D. J., Fegan, S., Finley, J., Gaidos, J., Hall, T., Hillas, A. M., Krennrich, F., Lessard, R. W., Masterson, C., Moriarty, P., Quinn, J., Rose, J., Samuelson, F., and Weekes, T. C. "Correlated Variability of MKN 421 at X-Ray and TeV Wavelengths on Time Scales of Hours." *Astroparticle Physics* 11 (1999): 189.
- Markevitch, M., Sarazin, C. L., and Vikhlinin, A. "Physics of the Merging Clusters Cygnus A, A3667, and A2065." *Astrophysical Journal* 521 (1999): 526.
- Mathur, S., Elvis, M., and Wilkes, B. "Multiple Velocity Components in the C IV Absorption Line of NGC 5548." *Astrophysical Journal* 519 (1999): 605.
- Mathur, S., Marshall, H., Evans, N., Green, P., and Wilkes, B. "ChaMP and the High Redshift Quasars in X-rays." In *The Hy-Redshift Universe: Galaxy Formation and Evolution at High Redshift*, ASP Conference Series, vol. 193, eds. A. J. Bunker and W. J. M. van Breugel, p. 612. San Francisco: Astronomical Society of the Pacific, 1999.
- McCarthy, M. C., Apponi, A. J., and Thaddeus, P. "Rhomboidal SiC<sub>3</sub>." *Journal of Chemical Physics* 110 (1999): 10645.
- McCarthy, M. C., Chen, W., Apponi, A. J., Gottlieb, C. A., and Thaddeus, P. "Hyperfine Structure of the C<sub>3</sub>H, C<sub>6</sub>H, and C<sub>8</sub>H Radicals." *Astrophysical Journal* 520 (1999): 158.
- McCarthy, M. C., Gottlieb, C. A., and Thaddeus, P. "Large Organic Molecules in the Laboratory and in Space." In *Laboratory Space Science Workshop*, p. 56. Cambridge, Massachusetts: Harvard-Smithsonian Center for Astrophysics, 1998.
- McCarthy, M. C., Grabow, J., Travers, M. J., Chen, W., Gottlieb, C. A., and Thaddeus, P. "Laboratory Detection of the Ring-Chain Carbenes HC<sub>4</sub>N and HC<sub>6</sub>N." *Astrophysical Journal* 513 (1999): 305.
- McDowell, J., Noble, M., and Elvis, M. "AXAF Data and Data Manipulation Software: The ASC Data Model." *Legacy No. 7* (1998): 64.
- McEnery, J. E., Bond, I. H., Boyle, P. J., Buckley, J. H., Bradbury, S. M., Breslin, A. C., Burdett, A. M., Bussons Gordo, J., Carter-Lewis, D. A., Catanese, M., Cawley, M. F., Fegan, D. J., Finley, J. P., Gaidos, J. A., Hall, A., Hillas, A. M., Krennrich, F., Lamb, R. C., Lessard, R., Masterson, C., Mohanty, G., Moriarty, P., Quinn, J., Rodgers, A. J., Rose, H. J., Samuelson, F. W., Sembroski, G. H., Srinivasan, R., Weekes, T. C., and Zweerink, J. "Large TeV Observations of the Variability and Spectrum of Markarian 421." In *Proceedings of the 25th International Cosmic Ray Conference*, vol. 3, eds. M. S. Potgieter, B. C. Raubenheimer, and D. J. van der Walt, p. 257. Singapore: World Scientific, 1999.
- McLaughlin, B. M., and Kirby, K. P. "Photoabsorption of Atomic Oxygen in the Vicinity of the K-Edge." *Journal of Physics B: Atomic, Molecular and Optical Physics* 31 (1998): 4991.
- McNamara, B. R., Jannuzi, B. T., Sarazin, C. L., Elston, R., and Wise, M. "An Alignment Effect in FR I Radio Galaxies: U-Band Polarimetry of the Abell 2597 Cluster Central Galaxy." *Astrophysical Journal* 518 (1999): 167.
- Medvedev, M. V., and Diamond, P. H. "Self-Organized States in Cellular Automata: Exact Solution." *Physical Review E* 58 (1998): 6824.
- Meibom, A., Petaev, M. I., Krot, A. N., Wood, J. A., and Keil, K. "Primitive FeNi Metal Grains in CH Carbonaceous Chondrites Formed by Condensation from a Gas of Solar Composition." *Journal of Geophysical Research* 104 (1999): 22053.
- Meixner, M., Ueta, T., Dayal, A., Hora, J. L., Fazio, G., Hrivnak, B. J., Skinner, C. J., Hoffmann, W. F., and Deutsch, L. K. "A Mid-Infrared Imaging Survey of Proto-Planetary Nebula Candidates." *Astrophysical Journal Supplement Series* 122 (1999): 221.
- Mennesson, B., Coudé Du Foresto, V., Perrin, G., Ruilier, C., Chagnon, G., Ridgway, S., Traub, W. A., Carleton, N., Lacasse, M. G., Morel, S., and Pras, B. "Interferometric Observations of Late Type Stars between 2 and 4 Microns Using Single-Mode Waveguides." In *Working on the Fringe: Optical and IR Interferometry from Ground and Space*, ASP Conference Series, vol. 194, eds. S. Unwin and R. Stachnik, p. 194. San Francisco: Astronomical Society of the Pacific, 1999.
- Mennesson, B., Mariotti, J. M., Coudé Du Foresto, V., Perrin, G., Ridgway, S., Ruilier, C., Traub, W. A., Carleton, N. P., Lacasse, M. G., and Mazé, G. "Thermal Infrared Stellar Interferometry Using Single-Mode Guided Optics: First Results with the TISIS Experiment on IOTA." *Astronomy and Astrophysics* 346 (1999): 181.
- Menou, K., Esin, A. A., Narayan, R., Garcia, M. R., Lasota, J., and McClintock, J. E. "Black Hole and Neutron Star Transients in Quiescence." *Astrophysical Journal* 520 (1999): 276.
- Menten, K. M., Carilli, C. L., and Reid, M. J. "Interferometric Observations of Redshifted Molecular Absorption Toward Gravitational Lenses." In *Highly Redshifted Radio Lines*, ASP Conference Series, vol. 156, eds. C. L. Carilli, J. E. Radford, K. M. Menten, and G. I. Langston, p. 218. San Francisco: Astronomical Society of the Pacific, 1999.

- Micela, G., Sciortino, S., Harnden, F. R., Kashyap, V., Rosner, R., Prosser, C. F., Damiani, F., Stauffer, J., and Caillault, J. "Deep ROSAT HRI Observations of the Pleiades." *Astronomy and Astrophysics* 341 (1999): 751.
- Millan-Gabet, R., Schloerb, F. P., Traub, W. A., and Carleton, N. P. "A NICMOS<sub>3</sub> Fringe Detector for the Infrared-Optical Telescope Array." In *Cool Stars, Stellar Systems and the Sun: Tenth Cambridge Workshop, ASP Conference Series*, vol. 154, eds. R. A. Donahue and J. A. Bookbinder, p. 2008. San Francisco: Astronomical Society of the Pacific, 1998; also in *Publications of the Astronomical Society of the Pacific* 111 (1999): 238.
- Millan-Gabet, R., Schloerb, F. P., Traub, W. A., Malbet, F., Berger, J. P., and Bregman, J. D. "Sub-Astronomical Unit Structure of the Near-Infrared Emission from AB Aurigae." *Astrophysical Journal (Letters)* 513 (1999): L131.
- Millis, R. L., Buie, M. W., Wagner, R. M., Elliot, J. L.; Holman, M. J., Grav, T., and Marsden, B. G. "1998 WV<sub>31</sub>." *Minor Planet Electronic Circular* 1999-A18 (1999): 18.
- . "1998 WU<sub>31</sub>." *Minor Planet Electronic Circular* 1999-A17 (1999): 17.
- . "1998 WT<sub>31</sub>." *Minor Planet Electronic Circular* 1999-A16 (1999): 16.
- . "1998 WS<sub>31</sub>." *Minor Planet Electronic Circular* 1999-A15 (1999): 15.
- Millis, R. L., Buie, M. W., Wagner, R. M., Willmarth, D. W., Smith, P. S., Harmer, D. L., Saha, A., Elliot, J. L., Holman, M. J., Grav, T., and Marsden, B. G. "1998 WW<sub>31</sub>." *Minor Planet Electronic Circular* 1999-B24 (1999): 24.
- . "1998 WZ<sub>31</sub>." *Minor Planet Electronic Circular* 1999-B27 (1999): 27.
- Millis, R. L., Elliot, J. L., Holman, M., Buie, M. W., Holman, M. J., Grav, T., Haug, N., Ernst, C., and Marsden, B. G. "1999 HG<sub>12</sub>." *Minor Planet Electronic Circular* 1999-N11 (1999): 11.
- Millis, R. L., Elliot, J. L., Holman, M. J., Falinski, K. A., Buie, M. W., Aksnes, K., Grav, T., Haug, N., and Marsden, B. G. "1999 HD<sub>12</sub>." *Minor Planet Electronic Circular* 1999-K18 (1999): 18.
- . "Six TNOs." *Minor Planet Electronic Circular* 1999-K12 (1999): 12.
- . "Six TNOs." *Minor Planet Electronic Circular* 1999-K15 (1999): 15.
- Mink, D. J., and Kurtz, M. J. "RVSAO 2.0—A Radial Velocity Package for IRAF." In *Astronomical Data Analysis Software and Systems VII. ASP Conference Series*, vol. 145, eds. R. Albrecht, R.N. Hook, and H.A. Bushouse, p. 93. San Francisco: Astronomical Society of the Pacific, 1998.
- Miralles, M. P., Strachan, L., Gardner, L. D., Dobryzcka, D., Ko, Y., Michels, J., Panasyuk, A., Suleiman, R., and Kohl, J. L. "Streamer HI Ly- $\alpha$  Observations during the SPARTAN 201-05/SOHO Coordinated Mission." In *Magnetic Fields and Solar Processes, ESA SP-448*. ed. A. Wilson, p. 1193. Noordwijk: ESA Publications Division, 1999.
- Miralles, M. P., Strachan, L., Gardner, L. D., Dobryzcka, D., Smith, P. L., and Kohl, J. L. "Variation of HI Lyman Alpha Profiles in the Solar Corona from 1993 to 1998." *EOS Transactions* 80 (1999): 818.
- Miralles, M. P., Strachan, L., Gardner, L. D., Smith, P. L., Kohl, J. L., Guhathakurta, M., and Fisher, R. R. "UVCS/Spartan Observations of Coronal Streamers." *EOS Transactions* 80 (1999): 263.
- . "Physical Properties of Coronal Streamers as Observed by SPARTAN 201." In *Solar Wind Nine, Proceedings of the Ninth International Solar Wind Conference, AIP Conference Proceedings*, vol. 471, eds. S. R. Habbal, R. Esser, J. V. Hollweg, and P. A. Isenberg, p. 239. Woodbury, New York: American Institute of Physics, 1999.
- . "Properties of Coronal Hole/Streamer Boundaries and Adjacent Regions as Observed by SPARTAN 201." *Space Science Reviews* 87 (1999): 277.
- Moran, J. M., Greenhill, L. J., and Herrnstein, J. R. "Observational Evidence for Massive Black Holes in the Centers of Active Galaxies." *Journal of Astrophysics and Astronomy (Bangalore)* 20 (1999): 165.
- Muñoz, J. A., Falco, E. E., Kochanek, C. S., Lehár, J., McLeod, B. A., Impey, C. D., Rix, H., and Peng, C. Y. "The Castles Project." *Astrophysics and Space Science* 263 (1998): 51.
- Muzerolle, J., Hartmann, L., and Calvet, N. "A Bry Probe of Disk Accretion in T Tauri Stars and Embedded Young Stellar Objects." *Astronomical Journal* 116 (1998): 2965.
- Myers, P. C. "Physical Conditions in Nearby Molecular Clouds." In *The Origins of Stars and Planetary Systems: Proceedings of NATO Advanced Study Institute on the Physics of Star Formation and Early Evolution—II*, eds. C. J. Lada and N. D. Kylafis, p. 67. Dordrecht: Kluwer Academic Publishers, 1999.
- Myers, P. C., and Gammie, C. F. "On the Turbulent Velocity Dispersion in Molecular Clouds." *Astrophysical Journal (Letters)* 522 (1999): L141.
- Navascues, D., Barrado Y., Stauffer, J. R., and Patten, B. M. "The Lithium Depletion Boundary and the Age of the Young Open Cluster IC2391." *Astrophysical Journal (Letters)* 522 (1999): L53.
- Nicastro, F., Fiore, F., Brandt, N., and Reynolds, C. S. "A Resonant Absorption Line in the ASCA Spectrum of NGC 985?" In *The Active X-Ray Sky: Results from BeppoSAX and RXTE, Proceedings of the Active X-Ray Sky Symposium*, eds. L. Scarsi, H. Bradt, P. Giommi, and F. Fiore, p. 501. Amsterdam: Elsevier, 1998. [Reprinted from: *Nuclear Physics B (Proceedings Supplement)* 69 (1998).]
- Nicastro, F., Fiore, F., and Matt, G. "Ionized Absorbers in AGN: The Role of Resonant Absorption." *Memorie Societa della Astronomica Italiana* 70 (1999): 33.
- . "Resonant Absorption in the Active Galactic Nucleus Spectra Emerging from Photoionized Gas: Differences between Steep and Flat Ionizing Continua." *Astrophysical Journal* 517 (1999): 108.
- Nicastro, F., Fiore, F., Perola, G. C., and Elvis, M. "Ionized Absorbers in Active Galactic Nuclei: The Role of

- Collisional Ionization and Time-Evolving Photoionization." *Astrophysical Journal* 512 (1999): 184.
- . "The Equilibrium Photoionized Absorber in 3C 351." *Astrophysical Journal* 512 (1999): 136.
- Nisenson, P., Contos, A., Korzennik, S., Noyes, R., and Brown, T. "The Advanced Fiber-Optic Echelle (AFOE) and Extra-Solar Planet Searches." In *Precise Stellar Radial Velocities, Proceedings of IAU Colloquium No. 170, ASP Conference Series*, vol. 185, eds. J. B. Hearnshaw and C. D. Scarfe, p. 143. San Francisco: Astronomical Society of the Pacific, 1999.
- Nisenson, P. and Papaliolios, C. "A Second Bright Source Detected near SN 1987A." *Astrophysical Journal (Letters)* 518 (1999): L29.
- Noyes, R. W., Contos, A. R., Korzennik, S. G., Nisenson, P., Brown, T. M., and Horner, S. D. "The Planet Orbiting  $\rho$  Coronae Borealis." In *Precise Stellar Radial Velocities, Proceedings of IAU Colloquium No. 170, ASP Conference Series*, vol. 185, eds. J. B. Hearnshaw and C. D. Scarfe, p. 162. San Francisco: Astronomical Society of the Pacific, 1999.
- Ostriker, E. C., Gammie, C. F., and Stone, J. M. "Kinetic and Structural Evolution of Self-Gravitating, Magnetized Clouds: 2.5-Dimensional Simulations of Decaying Turbulence." *Astrophysical Journal* 513 (1999): 259.
- Panasuyuk, A. V., Strachan, L., Fineschi, S., Gardner, L. D., Raymond, J., Kohl, J. L., Antonucci, E., Giordano, S., and Romoli, M. "Tomographic Reconstructions of the Corona from UVCS/SOHO Synoptic Observations." In *Synoptic Solar Physics, ASP Conference Series*, vol. 140, eds. K. S. Balasubramaniam; J. Harvey and D. Rabin, p. 407. San Francisco: Astronomical Society of the Pacific, 1998.
- Perrin, G., Coudé du Foresto, V., Ridgway, S. T., Mennesson, B., Ruilier, C., Mariotti, J., Traub, W. A., and Lacasse, M. G. "Interferometric Observations of R Leonis in the K Band. First Direct Detection of the Photospheric Pulsation and Study of the Atmospheric Intensity Distribution." *Astronomy and Astrophysics* 345 (1999): 221.
- Petaev, M. I., Meibom, A., Krot, A. N., and Wood, J. A. "The Condensation Origin of Some Metal in CH Chondrites: A Thermodynamic Model." In *Lunar and Planetary Science, XXX*, p. 1613. Houston, Texas: Lunar and Planetary Institute, 1999.
- Peterson, B. M., Barth, A. J., Berlind, P., Bertram, R., Bischoff, K., Bochkarev, N. G., Burenkov, A. N., Cheng, F., Dietrich, M., Filippenko, A. V., Giannuzzo, E., Ho, L. C., Huchra, J. P., Hunley, J., Kaspi, S., Kollatschny, W., Leonard, D. C., Malkov, Y. F., Matheson, T., Mignoli, M., Nelson, B., Papaderos, P., Peters, J., Pogge, R. W., Pronik, V. I., Sergeev, S. G., Sergeeva, E. A., Shapovalova, A. I., Stirpe, G. M., Tokarz, S., Wagner, R. M., Wanders, I., Wei, J., Wilkes, B. J., Wu, H., Xue, S., and Zou, Z. "Steps toward Determination of the Size and Structure of the Broad-Line Region in Active Galactic Nuclei. XV. Long-Term Optical Monitoring of NGC 5548." *Astrophysical Journal* 510 (1999): 659.
- Phillips, D. F., Wong, G. P., Bear, D., Stoner, R. E., and Walsworth, R. L. "Characterization and Stabilization of Fiber-Coupled Laser Diode Arrays." *Review of Scientific Instruments* 70 (1999): 2905.
- Pietsch, W., Trinchieri, G., and Vogler, A. "NGC 3079: X-Ray Emission from the Nuclear Super-Bubble and Halo." *Astronomy and Astrophysics* 340 (1998): 351.
- Piro, L., Nicastro, F., Feroci, M., Grandi, P., Parmar, A., Oosterbroek, T., Mineo, T., Piraino, S., Molendi, S., Fiore, F., Frontera, F., and Perola, G. C. "The Broad Band Spectrum and Variability of NGC 4151 Observed by BeppoSAX." In *The Active X-Ray Sky: Results from BeppoSAX and RXTE, Proceedings of the Active X-Ray Sky Symposium*, eds. L. Scarsi, H. Bradt, P. Giommi, and F. Fiore, p. 481. Amsterdam: Elsevier, 1998. [Reprinted from: *Nuclear Physics B (Proceedings Supplement)* 69 (1998).]
- Plume, R., Bergin, E. A., Williams, J. P., and Myers, P. C. "Electron Abundance in Dense Cloud Cores. Implications for Star Formation." In *Chemistry and Physics of Molecules and Grains in Space: Faraday Discussions No. 109*, p. 47. London: The Faraday Division of the Royal Society of Chemistry, 1998.
- Plume, R., Jaffe, D. T., Tatematsu, K., Evans, N. J., and Keene, J. "Large-Scale C I Emission from Molecular Clouds with Associated Ultraviolet Sources." *Astrophysical Journal* 512 (1999): 768.
- Posmentier, E. S., Soon, W. H., and Baliunas, S. L. "Natural Variability in An-Ocean-Atmosphere Climate Model." *Jurnal Fizik Malaysia (Journal of Physics Malaysia)* 19 (1999): 157.
- Pratap, P., Megeath, S. T., and Bergin, E. A. "High-Angular Resolution Millimeter-Wave and Near-Infrared Imaging of the Ultracompact H II Region G29.96-0.02." *Astrophysical Journal* 517 (1999): 799.
- Protheroe, R. J., Bhat, C. L., Fleury, P., Lorenz, E., Teshima, M., and Weekes, T. C. (on behalf of the Whipple Collaboration). "Very High Energy Gamma Rays from Markarian 501." In *Proceedings of the 25th International Cosmic Ray Conference*, vol. 8, eds. M. S. Potgieter, B. C. Raubenheimer, and D. J. van der Walt, p. 317. Singapore: World Scientific, 1999.
- Psaltis, D., and Lamb, F. K. "Magnetic Fields of Neutron Stars in Low Mass X-Ray Binaries." In *Neutron Stars and Pulsars: Thirty Years after the Discovery, Frontiers Science Series No. 24*, eds. N. Shibasaki, N. Kawai, S. Shibata, and T. Kifune, p. 179. Tokyo, Japan: Universal Academy Press, 1998.
- Quinn, J., for the Whipple Collaboration. "TeV Gamma-Ray Variability of Markarian 501." In *BL Lac Phenomenon, ASP Conference Series*, vol. 159, eds. L. O. Takalo and A. Sillanpää, p. 239. San Francisco: Astronomical Society of the Pacific, 1999.
- Quinn, J., Bond, I. H., Boyle, P. J., Bradbury, S. M., Breslin, A. C., Buckley, J. H., Burdett, A. M., Gordo, J. B., Carter-Lewis, D. A., Catanese, M., Cawley, M. F., Fegan, D. J., Finley, J. P., Gaidos, J. A., Hall, T., Hillas, A. M., Krennrich, F., Lamb, R. C., Lessard, R. W., Masterson, C., McEnery, J. E., Moriarty, P., Rodgers, A. J., Rose, H. J., Samuelson, F. W., Sembroski, G. H., Srinivasan, R., Vassiliev, V. V., and Weekes, T. C. "The Flux Variability

- of Markarian 501 in Very High Energy Gamma Rays." *Astrophysical Journal* 518 (1999): 693.
- Quinn, J., Bond, I. H., Boyle, P. J., Buckley, J. H., Bradbury, S. M., Breslin, A. C., Burdett, A. M., Bussons Gordo, J., Carter-Lewis, D. A., Catanese, M., Cawley, M. F., Fegan, D. J., Finley, J. P., Gaidos, J. A., Hall, A., Hillas, A. M., Krennrich, F., Lamb, R. C., Lessard, R., Masterson, C., McEnery, J. E., Mohanty, G., Moriarty, P., Rodgers, A. J., Rose, H. J., Samuelson, F. W., Sembroski, G. H., Srinivasan, R., Weekes, T. C., and Zweerink, J. "TeV Observations of the Variability and Spectrum of Markarian 501." In *Proceedings of the 25th International Cosmic Ray Conference*, vol. 3, eds. M. S. Potgieter, B. C. Raubenheimer, and D. J. van der Walt, p. 249. Singapore: World Scientific, 1999.
- Raymond, J. C. "Urgently Needed Atomic Rates for X-Ray and UV Astronomy" (Invited paper). In *Laboratory Space Science Workshop*, p. 1. Cambridge, Massachusetts: Harvard-Smithsonian Center for Astrophysics, 1998.
- Raymond, J., Suleiman, R., Kohl, J. L., and Noci, G. "Elemental Abundances in Coronal Structures." In *Solar Composition and Its Evolution—From Core to Corona*, eds. C. Fröhlich, M. C. E. Huber, S. K. Solanki, and R. von Steiger, p. 283. Dordrecht: Kluwer Academic Publishers, 1998.
- Reisenfeld, D. B., Gardner, L. D., Janzen, P. H., Savin, D. W., and Kohl, J. L. "Absolute Cross Section for  $\text{Si}^{2+}(\text{3s}^2\text{1S } 3\text{s}3\text{p } ^1\text{P})$  Electron-Impact Excitation." *Physical Review A* 60 (1999): 1153.
- Reisenfeld, D. B., Janzen, P. H., Gardner, L. D., Savin, D. W., and Kohl, J. L. "Absolute Cross Section for Electron Impact Excitation of Ground State  $\text{Si}^{2+}$ ." In *Laboratory Space Science Workshop*, p. 219. Cambridge, Massachusetts: Harvard-Smithsonian Center for Astrophysics, 1998.
- Remillard, R. A., McClintock, J. E., Sobczak, G. J., Bailyn, C. D., Orosz, J. A., Morgan, E. H., and Levine, A. M. "X-Ray Nova XTE J1550-564: Discovery of a Quasi-Periodic Oscillation near 185 HZ." *Astrophysical Journal* 517 (1999): L127.
- Remillard, R., Morgan, E., Levine, A., McClintock, J., Sobczak, G., Bailyn, C., Jain, R., and Orosz, J. "XTE J1550-564." *IAU Circular No. 7123* (1999): 2.
- Rideout, R. M., Pearson, J. F., Fraser, G. W., Lees, J. E., Brunton, A. N., Bannister, N. P., Kenter, A. T., and Kraft, R. P. "Synchrotron Measurements of the Absolute X-Ray Quantum Efficiency of CsI-Coated Microchannel Plates." In *EUV, X-Ray, and Gamma-Ray Instrumentation for Astronomy IX, SPIE Proceedings*, vol. 3445 eds. O. H. Siegmund and M. A. Gummin, p. 384. Bellingham, Washington: SPIE—The International Society for Optical Engineering, 1998.
- Riess, A. G., Kirshner, R. P., Schmidt, B. P., Jha, S., Challis, P., Garnavich, P. M., Esin, A. A., Carpenter, C., Grashius, R., Schild, R. E., Berlind, P. L., Huchra, J. P., Prosser, C. F., Falco, E. E., Benson, P. J., Briceño, C., Brown, W. R., Caldwell, N., dell'Antonio, I. P., Filippenko, A. V., Goodman, A. A., Grogan, N. A., Groner, T., Hughes, J. P., Green, P. J., Jansen, R. A., Kleyana, J. T., Luu, J. X., Macri, L. M., McLeod, B. A., McLeod, K. K., McNamara, B. R., McLean, B., Milone, A. A. E., Mohr, J. J., Moraru, D., Peng, C., Peters, J., Prestwich, A. H., Stanek, K. Z., Szentgyorgyi, A., and Zhao, P. "BVRI Light Curves for 22 Type IA Supernovae." *Astronomical Journal* 117 (1999): 707.
- Rines, K., Forman, W., Pen, U., Jones, C., and Burg, R. "Constraining  $q_0$  with Cluster Gas Mass Fractions: A Feasibility Study." *Astrophysical Journal* 517 (1999): 70.
- Robinson, A., Baliunas, S. L., Soon, W., and Robinson, Z. W. "Environmental Effects of Increased Atmospheric Carbon Dioxide." *Medical Sentinel* 3 (1998): 171.
- Rodriguez, L. F., D'Alessio, P., Wilner, D. J., Ho, P. T. P., Torrelles, J. M., Curiel, S., Gomez, Y., Lizano, S., Pedlar, A., Canto, J., and Raga, A. C. "Compact Protoplanetary Disks Around the Stars of a Young Binary System." *Nature* 395 (1998): 355.
- Romoli, M., Benna, C., Fineschi, S., Gardner, L. D., Kohl, J. L., and Noci, G. "The White Light Polarimeter of SOHO/UVCS." *Memorie della Societa Astronomia Italiana* 69 (1998): 703.
- Ros, E., Marcaide, J. M., Guirado, J. C., Ratner, M. I., Shapiro, I. I., Krichbaum, T. P., Witzel, A., and Preston, R. A. "High Precision Difference Astrometry Applied to the Triplet of S5 Radio Sources B1803+784/Q1928+738/B2007+777." *Astronomy and Astrophysics* 348 (1999): 381.
- Rothschild, R. E., Band, D. L., Blanco, P. R., Gruber, D. E., Heindl, W. A., MacDonald, D. R., Marsden, D. C., Jahoda, K., Pierce, D., Madejski, G., Elvis, M., Schwartz, D. A., Remillard, R., Zdziarski, A. A., Done, C., and Svensson, R. "Observation of Centaurus A by the Rossi X-Ray Timing Explorer." *Astrophysical Journal* 510 (1999): 651.
- Sakamoto, K., Scoville, N. Z., Yun, M. S., Crosas, M., Genzel, R., and Tacconi, L. J. "Counterrotating Nuclear Disks in Arp 220." *Astrophysical Journal* 514 (1998): 68.
- Sanmartín, J. R. and Estes, R. D. "The Orbital-Motion-Limited Regime of Cylindrical Langmuir Probes." *Physics of Plasmas* 6 (1999): 395.
- Schnopper, H. W., Silver, E. H., Ingram, R. H., Christensen, F. E., Hussain, A. M., Barbera, M., Romaine, S. E., Collura, A., Kenter, A. T., Bandler, S., and Murray, S. S. "X-Ray Optics Made from Thin Plastic Foils." In *X-Ray Optics, Instruments, and Missions II, SPIE Proceedings*, vol. 3766, eds. R. B. Hoover and A. B. Walker, p. 350. Bellingham, Washington: SPIE—The International Society for Optical Engineering, 1999.
- Schrijver, C. J., Title, A. M., Berger, T. E., Fletcher, L., Hurlburt, N. E., Nightingale, R. W., Shine, R. A., Tarbell, T. D., Wolfson, J., Golub, L., Bookbinder, J. A., DeLuca, E. E., McMullen, R. A., Warren, H. P., Kankelborg, C. C., Handy, B. N., and de Pontieu, B. "A New View of the Solar Outer Atmosphere by the Transition Region and Coronal Explorer." *Solar Physics* 302 (1999): 187.
- Shapiro, I. I. "A Century of Relativity." *Reviews of Modern Physics* 71 (1999): S41.



- Shen, Z., Lo, K. Y., Zhao, J., and Ho, P. "Multi-Wavelength VLBA Mapping of Sgr A." In *The Central Regions of the Galaxy and Galaxies, Proceedings of IAU Symposium No. 184*, ed. Y. Sofue, p. 437. Dordrecht: Kluwer Academic Publishers, 1998.
- Siemiginowska, A., and Elvis, M. "Unstable by Design." *Nature* 397 (1999): 476.
- Silbermann, N. A., Harding, P., Ferrarese, L., Stetson, P. B., Madore, B. F., Kennicutt, R. C., Freedman, W. L., Mould, J. R., Bresolin, F., Ford, H., Gibson, B. K., Graham, J. A., Han, M., Hoessel, J. G., Hill, R. J., Huchra, J., Hughes, S. M. G., Illingworth, G. D., Kelson, D., Macri, L., Phelps, R., Rawson, D., Sakai, S., and Turner, A. "The Hubble Space Telescope Key Project on the Extragalactic Distance Scale. XIV. The Cepheids in NGC 1365." *Astrophysical Journal* 515 (1999): 1.
- Smith, P. L., Yoshino, K., Esmond, J. R., Parkinson, W. H., Hubber, K. P., Ito, K., and Matsui, T. "Oscillator Strengths for VUV Lines of CO, H<sub>2</sub>, and HCl." In *Laboratory Space Science Workshop*, p. 240. Cambridge, Massachusetts: Harvard-Smithsonian Center for Astrophysics, 1998.
- Sobczak, G. J., McClintock, J. E., Remillard, R. A., Bailyn, C. D., and Orosz, J. A. "RXTE Spectral Observations of the 1996–1997 Outburst of the Microquasar GRO J1655–40." *Astrophysical Journal* 520 (1999): 776.
- Sobczak, G. J., McClintock, J. E., Remillard, R. A., Levine, A. M., Morgan, E. H., Bailyn, C. D., and Orosz, J. A. "X-Ray Nova XTE J1550–564: RXTE Spectral Observations." *Astrophysical Journal (Letters)* 517 (1999): L121.
- Soon, W., Baliunas, S., Robinson, A., and Robinson, Z. W. "Environmental Effects of Increased Atmospheric Carbon Dioxide." *Climate Research* 13 (1999): 149.
- Soon, W., Frick, P., and Baliunas, S. "Lifetime of Surface Features and Stellar Rotation: A Wavelet Time-Frequency Approach." *Astrophysical Journal (Letters)* 510 (1999): L135.
- Spahr, T. B., Marsden, B. G., Bialozynski, J., Dietrich, D., Greenberg, C., Hooper, E., McBee, D., McCarthy, D., Pici, J., Rudnick, G., Vedeler, C., and Hergenrother, C. W. "Comet C/1999 F1 (Catalina)." *IAU Circular No. 7148* (1999): 1.
- Spaans, M. "The Structure of the Multi-Phase ISM in Low Surface Brightness Galaxies." In *The Low Surface Brightness Universe, Proceedings of IAU Colloquium No. 171, ASP Conference Series*, vol. 170, eds. J. I. Davies, C. D. Impey, and S. Phillips, p. 237. San Francisco: Astronomical Society of the Pacific, 1999.
- Srinivasan, R., Buckley, J. H., Carter-Lewis, D. A., Catanese, M., Cawley, M. F., Colombo, E., Fegan, D. J., Finley, J. P., Gaidos, J. A., Hillas, A. M., Krennrich, F., Lamb, R. C., Lessard, R., McEnery, J., Moriarty, P., Quinn, J., Rodgers, A., Rose, H. J., Sembroski, G., Weekes, T. C., and Wilson, C. L. "Very High Energy Observations of PSR B195+32." In *Proceedings of the 25th International Cosmic Ray Conference*, vol. 3, eds. M. S. Potgieter, B. C. Raubenheimer, and D. J. van der Walt, p. 205. Singapore: World Scientific, 1999.
- Staguhn, J., Stutzki, J., Balm, S. P., Stark, A. A., and Lane, A. P. "Sub-mm [C I] and CO Observations of Molecular Clouds Presumably Interacting with the G359.54+0.18 Nonthermal Filaments." In *The Central Regions of the Galaxy and Galaxies, Proceedings of IAU Symposium No. 184*, ed. Y. Sofue, p. 175. Dordrecht: Kluwer Academic Publishers, 1998.
- Stefanik, R. P., Latham, D. W., and Torres, G. "Radial-Velocity Standard Stars." In *Precise Stellar Radial Velocities, Proceedings of IAU Colloquium No. 170, ASP Conference Series*, vol. 185, eds. J. B. Hearnshaw and C. D. Scarfe, p. 354. San Francisco: Astronomical Society of the Pacific, 1999.
- Stirpe, G. M., Wilkes, B. J., Comastri, A., Mathur, S., and O'Brien, P. T. "BeppoSAX Observations of the Seyfert 1 Galaxy NGC 3516." In *The Active X-Ray Sky: Results from BeppoSAX and RXTE, Proceedings of the Active X-Ray Sky Symposium*, eds. L. Scarsi, H. Bradt, P. Giommi, and F. Fiore, p. 505. Amsterdam: Elsevier, 1998. [Reprinted from: *Nuclear Physics B* (Proceedings Supplement) 69 (1998).]
- Strachan, L., Ciaravella, A., Raymond, J. C., Fineschi, S., O'Neal, R., Kohl, J. L., Modigliani, A., Noci, G., and Andrews, M. D. "Comparison of Outflow Velocity Determinations with UVCS and LASCO for the Coronal Mass Ejection of 13–14 August 1997." In *Solar Wind Nine, Proceedings of the Ninth International Solar Wind Conference, AIP Conference Proceedings*, vol. 471, eds. S. R. Habbal, R. Esser, J. V. Hollweg, and P. A. Isenberg, p. 637. Woodbury, New York: American Institute of Physics, 1999.
- Strachan, L., Ciaravella, A., Raymond, J. C., and Kohl, J. L. "What Can UVCS Observations Tell Us about Coronal Mass Ejections." *EOS Transactions* 80 (1999): 254.
- Strachan, L., Ko, Y., Panasyuk, A. V., Dobrzycka, D., Kohl, J. L., Romoli, M., Noci, G., Gibson, S. E., and Biesecker, D. A. "Constraints on Coronal Outflow Velocities Derived from UVCS Doppler Dimming Measurements and in-Situ Charge State Data." *Space Science Reviews* 87 (1999): 311.
- Strel'nitski, V. S., Alexander, J., Moran, J. M., and Reid, M. J. "Spatially Resolved H<sub>2</sub>O Masers as Probes of Supersonic Turbulence." In *Radio Emission from Galactic and Extragalactic Compact Sources, Proceedings of IAU Colloquium No. 164, ASP Conference Series*, vol. 144, eds. J. A. Zensus, G. B. Taylor, and J. M. Wrobel, p. 369. San Francisco: Astronomical Society of the Pacific, 1998.
- Suleiman, R. M., Kohl, J. L., Panasyuk, A. V., Ciaravella, A., Cranmer, S. R., Gardner, L. D., Frazin, R., Hauck, R., Smith, P. L., and Noci, G. "UVCS/SOHO Observations of HI Lyman Alpha Line Profiles in Coronal Holes at Heliocentric Heights Above 3.0 R<sub>☉</sub>." *Space Science Reviews* 87 (1999): 327.
- Taylor, J. M., Yan, Z., Dalgarno, A., and Babb, J. F. "Variational Calculations on the Hydrogen Molecular Ion." *Molecular Physics* 97 (1999): 25.
- Thaddeus, P., and McCarthy, M. C. "Carbon Chains and Exotic Rings in the Laboratory and in Space." In *The Physics and Chemistry of the Interstellar Medium. Proceedings of*

- the 3rd Cologne-Zermatt Symposium*, eds. V. Ossenkopf, J. Stutzki, and G. Winnewisser, p. 38. Germany: GCA-Verlag Herdecke, 1999.
- Thomas, W., von Bargaen, A., Hegels, E., Slijkhuis, S., Chance, K. V., and Spurr, R. J. "Detection of Biomass Burning Combustion Products in the Atmosphere from UV/VIS Backscatter Measurements Taken by the GOME Spectrometer." In *Environmental Sensing and Applications, SPIE Proceedings*, vol. 3821, eds. M. Carleer, M. Hilton, T. Lamp, R. Reuter, G. M. Russwurm, K. Schaefer, K. Weber, K. Weitkamp, J.-P. Wolf, and L. Woppowa, p. 146. Bellingham, Washington: SPIE—The International Society for Optical Engineering, 1999.
- Ticha, J., Tichy, M., Moravec, Z., Galad, A., Gajdos, S., Toth, J., Zhu, J., Li, X. Y., Garradd, G. J., Zoltowski, F. B., Pravec, P., Sarounova, L., Balam, D. D., Blythe, M., Shelly, F., Bezpalko, M., Elowitz, M., Stuart, J., Vighh, H., Sayer, R., Ries, J. G., Africano, J. L., Hug, G., Bell, G., Holvorcem, P. R., and Marsden, B. G. "1999 GT6." *Minor Planet Electronic Circular No. 1999-H13* (1999): 13.
- Trinchieri, G., Israel, G. L., Chiappetti, L., Belloni, T., Stella, L., Primini, F., Fabbiano, P., and Pietsch, W. "Broad Band X-Ray Spectra of M31 Sources with BeppoSAX." *Astronomy and Astrophysics* 348 (1999): 43.
- Trotter, A. S., Moran, J. M., and Greenhill, L. J. "Water Maser Emission and the Parsec-Scale Jet in NGC 3079." In *Radio Emission from Galactic and Extragalactic Compact Sources, Proceedings of IAU Colloquium No. 164, ASP Conference Series*, vol. 144, eds. J.A. Zensus, G.B. Taylor, and J.M. Wrobel, p. 239. San Francisco: Astronomical Society of the Pacific, 1998.
- Tseng, C. H., Mair, R. W., Wong, G. P., Williamson, D., Cory, D. G., and Walsworth, R. L. "Magnetic Resonance Imaging of Laser Polarized Liquid Xenon." *Physical Review E* 59 (1999): 1785.
- Tseng, C. H., Wong, G. P., Pomeroy, V. R., Mair, R. W., Hinton, D. P., Hoffmann, D., Stoner, R. E., Hersman, F. W., Cory, D. G., and Walsworth, R. L. "Low-Field MRI of Laser Polarized Noble Gas." *Physical Review Letters* 81 (1998): 3785.
- Turner, J. L., Beck, S. C., and Ho. P. T. P. "Gas and Hidden Star Formation in NGC 5253." In *Wolf-Rayet Phenomena in Massive Stars and Starburst Galaxies, Proceedings of IAU Symposium No. 193*, eds. K. A. Van Der Huchet, G. Koenigsberger, and P. R. J. Eenens, p. 758. San Francisco: Astronomical Society of the Pacific, 1999.
- Uitenbroek, H., Dupree, A. K., and Gilliland, R. L. "Imaging Spectroscopy of Betelgeuse in the Ultraviolet." In *Cool Stars, Stellar Systems and the Sun: Tenth Cambridge Workshop, ASP Conference Series*, vol. 154, eds. R. A. Donahue and J. A. Bookbinder, p. 393. San Francisco: Astronomical Society of the Pacific, 1998.
- Väisänen, P., and Tollestrup, E. V. "Detecting the Low Surface Brightness Universe: The Extragalactic Background Light and LSB Galaxies." In *Low Surface Brightness Universe, Proceedings of IAU Symposium No. 171*, eds. J. I. Davies, C. D. Impey, and S. Phillips, p. 365. San Francisco: Astronomical Society of the Pacific, 1999.
- Vásquez, A. M., Raymond, J. C., and van Ballegoijen, A. A. "UVCS Observations and Modeling of Streamers." *Space Science Reviews* 87 (1999): 335.
- Vásquez, A. M., van Ballegoijen, A. A., and Raymond, J. C. "Model of Solar Wind Flow Near an Equatorial Coronal Streamer." In *Solar Wind Nine, Proceedings of the Ninth International Solar Wind Conference, AIP Conference Proceedings*, vol. 471, eds. S. R. Habbal, R. Esser, J. V. Hollweg, and P. A. Isenberg, p. 243. Woodbury, New York: American Institute of Physics, 1999.
- van Ballegoijen, A. A., and Nisenson, P. "Dynamics of Magnetic Elements in the Photosphere and the Formation of Spicules." In *High Resolution Solar Physics: Theory, Observations, and Techniques, ASP Conference Series*, vol. 183, eds. T. R. Rimmele, K. S. Balasubramaniam, and R. R. Radick, p. 30. San Francisco: Astronomical Society of the Pacific, 1999.
- van Ballegoijen, A. A., Nisenson, P., Noyes, R. W., Löfdahl, M. G., Stein, R. F., Nordlund, Å., and Krishnakumar, V. "Dynamics of Magnetic Flux Elements in the Solar Photosphere." *Astrophysical Journal* 509 (1998): 435.
- van Dyk, S. D., Peng, C. Y., Barth, A. J., Filippenko, A. V., Chevalier, R. A., Fesen, R. A., Fransson, C., Kirshner, R. P., and Leibundgut, B. "Hubble Space Telescope WFPC2 Imaging of SN 1979C and Its Environment." *Publications of the Astronomical Society of the Pacific* 111 (1999): 313.
- Vestergaard, M., and Wilkes, B. J. "An Empirical Ultraviolet Iron Spectrum Template." In *Structure and Kinematics of Quasar Broad Line Regions, ASP Conference Series*, vol. 175, eds. C. M. Gaskell, W. N. Brandt, M. Dietrich, D. Dultzin-Hacyan, and M. Eracleous, p. 297. San Francisco: Astronomical Society of the Pacific, 1999.
- Vikhlinin, A., McNamara, B. R., Hornstrup, A., Quintana, H., Forman, W., Jones, C., and Way, M. "X-Ray Overluminous Elliptical Galaxies: A New Class of Mass Concentrations in the Universe?" *Astrophysical Journal (Letters)* 520 (1999): L1.
- Walsworth, R., Mair, R., Wong, G., Hoffmann, D., Patz, S., Hurlimann, M., and Schwartz, L. "Time-Dependent Noble Gas Diffusion NMR in Porous Media and Implications for Lung Study." *European Radiology* 9 (1999): B23.
- Walsworth, R., Wong, G., Tseng, C. H., Pomeroy, V., Mair, R., Hinton, D., Hoffmann, D., Stoner, R., Hersman, F. W., and Cory, D. "Low Field MRI of Laser Polarized Noble Gas." *European Radiology* 9 (1999): B4.
- Weekes, T. C., Akerlof, C., Biller, S., Breslin, A. C., Catanese, M., Carter-Lewis, D. A., Cawley, M. F., Dingus, B., Fazio, G. G., Fegan, D. J., Finley, J., Fishman, G., Gaidos, J., Gillanders, G. H., Gorham, P., Grindlay, J. E., Hillas, A. M., Huchra, J., Kaaret, P., Kertzman, M., Kieda, D., Krennrich, F., Lamb, R. C., Lang, M. J., Marscher, A. P., Matz, S., McKay, T., Muller, D., Ong, R., Purcell, W., Rose, H. J., Sembroski, G., Seward, F. D., Slane, P., Swordy, S., Turner, T., Ulmer, M., Urban, M., and Wilkes, B. "VERITAS: The Very Energetic Radiation Imaging Telescope Array System." In *Proceedings of the 25th International Cosmic Ray Conference*, vol. 5, eds. M. S.



- Potgieter, B. C. Raubenheimer, and D. J. van der Walt, p. 173. Singapore: World Scientific, 1999.
- Weekes, T. C., Bond, I. H., Boyle, P. J., Bradbury, S. M., Breslin, A. C., Buckley, J. H., Burdett, A. M., Bussons Gordo, J., Carter-Lewis, D. A., Catanese, M., Cawley, M. F., Fegan, D. J., Finley, J. P., Gaidos, J. A., Gillanders, G. H., Hall, T., Harris, K., Hillas, A. M., Kertzman, M., Krennrich, F., Lang, M. J., Lessard, R. W., McEnery, J. E., Masterson, C., Moriarty, P., Quinn, J., Rodgers, A. J., Rose, H. J., Reynolds, P. T., Samuelson, F. W., Sembroski, G. H., Srinivasan, R., and Zweerink, J. "TeV Gamma-Ray Observations of Pulsars and Supernova Remnants." In *Neutron Stars and Pulsars: Thirty Years after the Discovery*, *Frontiers Science Series No. 24*, eds. N. Shibasaki, N. Kawai, S. Shibata, and T. Kifune, p. 465. Tokyo, Japan: Universal Academy Press, 1998.
- Weinberg, D. H., Burles, S., Croft, R. A. C., Dave, R., Gomez, G., Hernquist, L., Katz, N., Kirkman, D., Liu, S., Miralda-Escude, J., Pettini, M., Phillips, J., Tytler, D., and Wright, J. "Cosmology with the Lyman-Alpha Forest." In *Evolution of Large Scale Structure: From Recombination to Garching, Proceedings of the MPA-Cosmology/ESO Conference*, eds. A. J. Banday, R. K. Sheth, and L. N. DaCosta, p. 347. Enschede, The Netherlands: Print Partners Ipskamp, 1998.
- Werner, P. N., Worrall, D. M., and Birkinshaw, M. "Redshift and Velocity Dispersion of the Cluster of Galaxies Around NGC 326." *Monthly Notices of the Royal Astronomical Society* 307 (1999): 722.
- White, G. J., Smith, H. A., Stacey, G. J., Fischer, J., Spinoglio, L., Baluteau, J.-P., Cernicharo, J., and Bradford, C. M. "The Galactic Centre—A Spectroscopic and Imaging Study with the LWS Spectrometer." In *The Universe as Seen by ISO, ESA-SP 427*, vol. II, eds. P. Cox and M. F. Kessler, p. 787. Noordwijk: ESA Publications Division, 1999.
- Wilkes, B. J., Hooper, E. J., McLeod, K. K., Elvis, M. S., Impey, C. D., Lonsdale, C. J., Malkan, M. A., and McDowell, J. C. "The Far-Infrared Continuum of Quasars In *The Universe as Seen by ISO, ESA-SP 427*, vol. II, eds. P. Cox and M. F. Kessler, p. 845. Noordwijk: ESA Publications Division, 1999.
- Wilkes, B. J., Kuraszekiewicz, J., Green, P. J., Mathur, S., and McDowell, J. C. "Investigation of the Relation between the Spectral Energy Distributions and the Emission Lines in Low-Redshift Quasars." *Astrophysical Journal* 513 (1999): 76.
- Wilkes, B. J., Mathur, S., Fiore, F., and Antonelli, A. "SAX Observations of the Maser AGN ESO 103-G35." In *Structure and Kinematics of Quasar Broad Line Regions*, *ASP Conference Series*, vol. 175, eds. C. M. Gaskell, W. N. Brandt, M. Dietrich, D. Dultzin-Hacyan, and M. Eracleous, p. 395. San Francisco: Astronomical Society of the Pacific, 1999.
- Williams, J. P., Myers, P. C., Wilner, D. J., and di Francesco, J. "A High-Resolution Study of the Slowly Contracting, Starless Core L1544." *Astrophysical Journal (Letters)* 513 (1999): L61.
- Wilner, D. J., Bourke, T. L., Ho, P. T. P., Killeen, N. E. B., and Calabretta, M. "A Search for Water Masers in the Gravitationally Lensed Quasars H1413+117 and MG 0414+0534." *Astronomical Journal* 117 (1999): 1139.
- Wilner, D. J., Reid, M. J., and Menten, K. M. "The Synchrotron Jet from the H<sub>2</sub>O Maser Source in W3(OH)." *Astrophysical Journal* 513 (1999): 775.
- Wong, G., Tseng, C. H., Pomeroy, V., Mair, R., Hinton, D., Hoffmann, D., Stoner, R., Hersman, F. W., Cory, D., and Walsworth, R. L. "Low Field MR Imaging of Laser-Polarized Noble Gas." In *Proceedings of the Seventh Scientific Meeting of the International Society for Magnetic Resonance in Medicine*, p. 2089. Philadelphia: 1999.
- Wong, G. P., Tseng, C. H., Pomeroy, V. R., Mair, R. W., Hinton, D. P., Hoffmann, D., Stoner, R. E., Hersman, F. W., Cory, D. G., and Walsworth, R. L. "A System for Low Field Imaging of Laser-Polarized Noble Gas." *Journal of Magnetic Resonance* 141 (1999): 217.
- Wood, C. H., Habbal, S. R., Esser, R., and Penn, M. "Comparison of Fe  $\lambda$ 5303,  $\lambda$ 6374, and  $\lambda$ 7892 Spectral Line Observations in a Coronal Hole and Streamer." In *Solar Wind Nine, Proceedings of the Ninth International Solar Wind Conference*, *AIP Conference Proceedings*, vol. 471, eds. S. R. Habbal, R. Esser, J. V. Hollweg, and P. A. Isenberg, p. 293. Woodbury, New York: American Institute of Physics, 1999.
- Wood, K., Crosas, M., and Ghez, A. "GG Tauri's Circumbinary Disk: Models for Near-Infrared Scattered-Light Images and <sup>13</sup>CO (J=1 0) Line Profiles." *Astrophysical Journal* 516 (1999): 335.
- Worrall, D. M., Birkinshaw, M., Remillard, R. A., Prestwich, A., Tucker, W. H., and Tananbaum, H. "A Multiwavelength Study of the Extreme AGN J2310-437." *Astrophysical Journal* 516 (1999): 163.
- Yan, Z.-C., and Dalgarno, A. "Third-Order Dispersion Coefficients for H(1s)-H(1s) System." *Molecular Physics* 96 (1999): 863.

## Smithsonian Center for Materials Research and Education

- Arnold, D.E., Hector A. Neff, R.L. Bishop, and M.D. Glascock. "Testing interpretative assumptions of neutron activation analysis: contemporary pottery in Yucatán, 1964-1994." In *Material Meanings: Critical Approaches to the Interpretation of Material Culture*, edited by E.S. Chilton, pp. 61-84. Foundations of Archaeological Inquiry. Salt Lake City: University of Utah Press, 1999.
- Ballard, Mary W. "Biodeterioration of textiles," In *Biodeterioration*, edited by A.E. Charola and Robert Koestler. London: Butterworths, 1999.
- . (section co-author). *Conservation Services Directory*. edited by Mary W. Ballard. Washington, DC: Washington Conservation Guild, 1999.
- . "May meeting summary: Star-Spangled Banner conservation project—Suzanne Thomassen-Krauss."

- Washington Conservation Guild Newsletter*, vol. 22, no. 4 (December 1998): 3–4.
- Beaubien, Harriet F. "Conservation's key contributions to archaeological projects in Central America." In *Abstracts of papers presented at the 27th annual meeting in St. Louis, Missouri, June 8–13, 1999*, pp. 1–2. Washington, DC: American Institute for Conservation of Historic and Artistic Works, 1999.
- . "Desalination parameters for Harappan ceramics, part 2." In *Abstracts of papers presented at the 27th annual meeting in St. Louis, Missouri, June 8–13, 1999*, p. 51. Washington, DC: American Institute for Conservation of Historic and Artistic Works, 1999.
- Beaubien, Harriet F., Stephanie E. Hornbeck, and Elizabeth C. Robertson. "Sección 8: La conservación de artefactos." En *Informe del Proyecto Arqueológico Aguateca: La Temporada de 1998, presentado al Instituto de Antropología e Historia de Guatemala* [English version: "Artifact conservation during the 1998 field season." In *The Aguateca Archaeological Project's 1998 Field Season Report*], edited by Takeshi Inomata, Daniela Triadan and Erick Ponciano, pp. 67–72. December 1998.
- Beaubien, Harriet F., Elizabeth C. Robertson, and Stephanie E. Hornbeck. "Appendix 3: Artifact Conservation during the 1998 Field Season at Harappa." In *Harappa Archaeological Research Project: Harappa Excavations 1998*, edited by Richard H. Meadow, Jonathon Mark Kenoyer and Rita P. Wright, pp. 32–41. 30 March 1999.
- Blackman, M.J. "Chemical characterization of local Anatolian and Uruk style sealing clays from Hacinebi." *Paleorient*, vol. 25, no. 1 (1999): 51–56.
- Boyer, Joanne M. "An investigation of ceramic shards from Kaman-Kalehöyük, Turkey, to determine their mode of manufacture—part 1." *Kaman-Kalehöyük 8* (Anatolian Archaeological Studies), vol. 8 (1999): 355–366.
- Chalfoun, David J. and Noreen C. Tuross. "Botanical remains: utility in protein and DNA research." *Ancient Biomolecules*, vol. 3 (1999): 67–79.
- Erhardt, David. "Degradation and failure in the lab: studies of the aging processes of archival materials." In *Abstracts of the Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy*, Orlando, March 7–12, 1999. 1999.
- Erhardt, David, Charles S. Tumosa, and Marion F. Mecklenburg. "Material consequences of the aging of paper." In *Preprints, ICOM Committee for Conservation*, vol. II, pp. 501–506. 12th Triennial Meeting of the Conservation Committee of the International Council of Museums, Lyon, France, 29 August–3 September 1999. 1999.
- Fernández Ruiz, Ramon, Juan-Diego Tornero, and Manuel García-Heras. "Advances in the application of total reflection x-ray fluorescence (TXRF) to the analysis of archaeological ceramics." In *Actes del 5è Curs d'arqueologia d'Andorra*, 1997, pp. 137–144. 1999.
- Fogel, Marilyn L. and Noreen C. Tuross. "Transformation of plant biochemicals to geological macromolecules during early diagenesis." *Oecologia*, vol. 120 (1999): 336–346.
- García-Heras, Manuel. "La Artesanía Alfarera Celtibérica. Un Reto para la Investigación." In *IV Simposio sobre Celtíberos: Economía, Zaragoza*, pp. 221–239. Institucion 'Fernando el Catolico' (CSIC) Excma. Diputacion Provincial, 1999.
- . "Estudios arqueométricos sobre materiales cerámicos de la edad del hierro." *Boletín de la Sociedad Española de Cerámica y Vidrio*, vol. 38, no. 4 (1999): 289–295.
- Goodway, Martha. "Hardness related to strength in high phosphorus iron." In *Preprint, Historical Metallurgy Society Annual Conference, September 1999*. 1999.
- . "The relation between hardness and strength in high phosphorus iron." *Journal of the Historical Metallurgy Society*, vol. 33 (1999): 104–105.
- Grisson, Carol A. "Cache two." In *Symbols at 'Ain Ghazal, 'Ain Ghazal Excavation Reports, Vol. 1*, edited by Denise Schmandt-Besserat. <http://menic.utexas.edu/menic/ghazal>.
- . "Catalogue of cache two." In *Symbols at 'Ain Ghazal, 'Ain Ghazal Excavation Reports, Vol. 1*, edited by Denise Schmandt-Besserat. <http://menic.utexas.edu/menic/ghazal>.
- Grisson, Carol A., A. Elena Charola, Ann Boulton, and Marion F. Mecklenburg. "Evaluation over time of an ethyl silicate consolidant applied to ancient lime plaster." *Studies in Conservation*, vol. 44, no. 2 (1999): 113–120.
- Indictor, Norman and Mary Ballard. "A survey of some recent literature and studies pertaining to the C-14 dating of textiles." In *Preprints, ICOM Committee for Conservation*, vol. II, pp. 631–636. 12th Triennial Meeting of the Conservation Committee of the International Council of Museums, Lyon, France, 29 August–3 September 1999. 1999.
- Inomata, Takeshi, Daniela Triadan, Erick Ponciano, Richard E. Terry, Harriet F. Beaubien, Estela Pinto, and Shannon Coyston. "Residencias de la familia real y de la elite en Aguateca, Guatemala." *Mayab*, no. 11 (1998): 23–39.
- Henrickson, R.C. and M.J. Blackman. "Hellenistic production of terra cotta roof tiles among the ceramic industries at Gordion." *Oxford Journal of Archaeology*, vol. 18, no. 3 (1999): 307–326.
- Kolman, Connie J., Arturo Centurion-Lara, Sheila A. Lukehart, Douglas W. Owsley, and Noreen C. Tuross. "Identification of *Treponema pallidum* subspecies *pallidum* in a 200-year-old skeletal specimen." *The Journal of Infectious Diseases*, vol. 180 (1999): 2060–2063.
- Mecklenburg, Marion F. and Charles S. Tumosa. "Temperature and relative humidity effects on the mechanical and chemical stability of collections." *ASHRAE Journal*, vol. 41, no. 4 (April 1999): 77–82.
- N'Gadi, Ann B. and David W. von Endt, eds. *1999 Annual Meeting Program with Abstracts*. 14th Annual Meeting of the Society for the Preservation of Natural History Collections, Washington, DC, June 27–July 2. June 1999.
- Olaerxea, Carlos, Ramon Fernández Ruiz, Manuel García-Heras, and Jesús Sesma. "Análisis composicional mediante TXRF de producciones cerámicas navarras (Calcolítico-Bronce-Hierro)." In *Actes del 5è Curs d'arqueologia d'Andorra*, 1997, pp. 212–223. 1999.
- Tsang, Jia-sun and Donald C. Williams. *A Closer Look at Santos; Una Mirada mas Profunda a los santos*. Washington,

- DC: Smithsonian Center for Materials Research and Education and The de Saisset Museum. May 1999.
- Tumosa, Charles S. "Speculation on the effect of gunshot or explosive residue on silk." *Textile Conservation Newsletter*, no. 37 (Fall 1999): 10-13.
- Tumosa, Charles S. and Marion F. Mecklenburg. "Materials characterization and the computer modeling of works of art" [abstract]. In *Abstracts Pittcon 99*, p. 858. 1999.
- Tumosa, Charles S., Jennifer Millard, David Erhardt, and Marion F. Mecklenburg. "Effects of solvents on the physical properties of paint films." In *Preprints, ICOM Committee for Conservation*, vol. I, pp. 347-352. 12th Triennial Meeting of the Conservation Committee of the International Council of Museums, Lyon, France, 29 August-3 September 1999. 1999.
- von Endt, David W., C.A. Ross, and P.E. Hare. "Initial results of cleaning small vertebrate skeletons with trypsin." *Collection Forum*, vol. 13 (1999): 51-62.
- von Endt, David W., E.R. Yourd, and P.E. Hare. "Spirit collections: accelerated aging studies concerning the stability of keratin in ethanol and formalin." *Collection Forum*, vol. 14 (1999): 66-77.
- ## Smithsonian Environmental Research Center
- Aerts, R., J.T.A. Verhoeven, and D.F. Whigham. 1999. Plant-mediated controls on nutrient cycling in temperate fens and bogs. *Ecology* 80: 2170-2181.
- Balch, W.M., D.T. Drapeau, and J.J. Fritz. 1999. Monsoonal forcing of calcification in the Arabian Sea. *Deep-Sea Research II* 47:1301-1337.
- , D.T. Drapeau, T.L. Cucci, R.D. Vailancourt, K.A. Kilpatrick, and J.J. Fritz. 1999. Optical backscattering by calcifying algae: Separating the contribution of particulate inorganic and organic carbon fractions. *Journal of Geophysical Research* 104:1541-1558.
- Bushmann, P.J. 1999. Concurrent signals and behavioral plasticity in blue crab (*Callinectes sapidus* Rathbun) courtship. *Biological Bulletin* 197: 63-71.
- Clark, M.E., T.G. Wolcott, D.L. Wolcott, and A.H. Hines. 1999. Foraging and agonistic activity co-occur in free-ranging blue crabs (*Callinectes sapidus*): observation of animals by ultrasonic telemetry. *Journal of Experimental Marine Biology and Ecology* 233: 143-160.
- , M.E., T.G. Wolcott, D.L. Wolcott, and A.H. Hines. 1999. Intraspecific interference among foraging blue crabs *Callinectes sapidus*: interactive effects of predator density and prey patch distribution. *Marine Ecology Progress Series* 178:69-78.
- Coats, D. W. 1999. Parasitic life styles of marine dinoflagellates. *J. Euk. Microbiol.*, 46: 402-409.
- and Revelante, N. 1999. Distributions and trophic implications of microzooplankton. In: *Ecosystems at the Land-Sea Margin: Drainage Basin to Coastal Sea*, T. Malone, A. Malej, L. Harding, N. Smolaka, and E. Turner (eds.), American Geophysical Union, 207-239.
- Correll, D. L., T. E. Jordan, and D. E. Weller. 1999. Precipitation effects on sediment and associated nutrient discharges from Rhode River watersheds. *Journal of Environmental Quality* 28:1897-1907.
- , T. E. Jordan, and D. E. Weller. 1999. Effects of precipitation and air temperature on nitrogen discharges from Rhode River watersheds. *Water, Air, and Soil Pollution* 115: 547-575.
- , T. E. Jordan, and D. E. Weller. 1999. Transport of nitrogen and phosphorus from Rhode River watersheds during storm events. *Water Resources Research* 35:2513-2521.
- , T. E. Jordan, and D. E. Weller. 1999. Effects of precipitation and air temperature on phosphorus fluxes from Rhode River watersheds. *Journal of Environmental Quality* 28:144-154.
- , T. E. Jordan, and D. E. Weller. 1999. Effects of interannual variation of precipitation on stream discharge from Rhode River subwatersheds. *Journal of the American Water Resources Association* 35:73-82.
- Dalling J, C.E. Lovelock, and S.P. Hubbell. 1999. Growth responses of seedlings of two neotropical pioneer species to simulated forest gap environments. *Journal of Tropical Ecology* 15: 827-839.
- Drake, B.G., Azcon-Bieto, J., Berry, J., Bunce, J., Dijkstra, P., Farrar, J., Gifford, R.M., Gonzalez-Meler, M.A., Koch, G., Lambers, H., Siedow, J., and Wullschlegel, S. 1999. Does elevated atmospheric CO<sub>2</sub> concentration inhibit mitochondrial respiration in green plants? *Plant Cell and Environment* 22:649-657.
- Feller, I.C. and K.L. McKee. 1999. Small gap creation in Belizean mangrove forests by a wood-boring insect. *Biotropica* 31: 607-617.
- , D.F. Whigham, J.P. O'Neill, and K.M. McKee. 1999. Effects of nutrient enrichment on within-stand cycling in mangrove forest. *Ecology* 80: 2193-2205.
- Fofonoff, P.W., G.M. Ruiz, A.H. Hines, and L. McCann. 1999. Overview of biological invasions in the Chesapeake Bay region: Summary of impacts. Pp. 168-180 in: Therres, G.D. (ed.), *Conservation of biological diversity: a key to the restoration of the Chesapeake Bay and beyond*. Maryland Department of Natural Resources.
- Fritz, J.J. 1999. Carbon fixation and coccolith detachment in the coccolithophore *Emiliania huxleyi* in nitrate-limited cyclostats. *Marine Biology* 133:509-518.
- Gunderson, J. H., Goss, S. H., and Coats, D. W. 1999. The phylogenetic position of *Amoebophrya* sp. from *Gymnodinium sanguineum*. *J. Euk. Microbiol.*, 46:194-197.
- Holberton, R. L. and P.P. Marra. 1999. Endocrine aspects of physiological condition and habitat quality in migrant birds during the non-breeding period. In: Adams, N. and Slotow, R. (Eds.), *Proc 22 Int. Ornithol. Congr.*, Durban, University of Natal, South Africa.
- Hungate, B. A., Dijkstra, P., Johnson, D. V. W., Hinkle, C. Ross, and B.G. Drake. 1999. Elevated CO<sub>2</sub> increases nitrogen fixation and decreases soil nitrogen mineralization in Florida scrub oak. *Global Change Biology*. 5:781-789.

- Jordan, T. E., D. F. Whigham, K. Hofmockel, and N. Gerber. 1999. Restored wetlands in crop fields control nutrient runoff. Pp. 49–60 in: J. Vymazal (ed.) *Nutrient Cycling and Retention in Natural and Constructed Wetlands*. SPB Academic Publishing bv, Amsterdam, The Netherlands.
- Kendall, M.S. and T.G. Wolcott. 1999. The influence of male mating history on male-male competition and female choice in mating associations in the blue crab, *Callinectes sapidus* (Rathbun). *Journal of Experimental Marine Biology and Ecology* 239:23–32.
- Kepner, R. L., Jr., Wharton, R. A., Jr., and Coats, D. W. 1999. Ciliated protozoa of two Antarctic lakes: analysis by quantitative protargol staining and examination of artificial substrates. *Polar Biol.*, 21:285–294.
- Kudoh, H., H. Shibaie, H. Takasu, D.F. Whigham, and S. Kawano. 1999. Genet structure and determinants of clonal structure in a temperate deciduous woodland herb, *Uvularia perfoliata*. *J. Ecology* 87:244–257.
- LaVoie, D.M., L.D. Smith, and G.M. Ruiz. 1999. The potential for intracoastal transfer of non-indigenous species in the ballast water of ships. *Est. Coast. Shelf Sci.* 48:551–564.
- Lefsky, M.A. D. Harding, W.B. Cohen, G. Parker, and H.H. Shugart. 1999. Surface lidar remote sensing of basal area and biomass in deciduous forests of eastern Maryland, USA. *Remote Sensing of Environment* 67:83–98.
- , W.B. Cohen, S.A. Acker, G.G. Parker, T.A. Spies, and D. Harding. 1999. Lidar Remote Sensing of the Canopy Structure and Biophysical Properties of Douglas-Fir Western Hemlock Forests. *Remote Sensing of Environment* 70:339–361.
- Li J., P. Dijkstra, R. Hinkle, R.M. Wheeler, and B.G. Drake, 1999. Photosynthetic acclimation to elevated atmospheric CO<sub>2</sub> concentration in the Florida scrub-oak species *Quercus geminata* and *Quercus myrtifolia*. *Tree Physiology* 19:229–234.
- Loustau, D., B. Hungate, and B.G. Drake, 1999. Effects of water and rising atmospheric CO<sub>2</sub> on net primary and net ecosystem production of terrestrial ecosystems: interactions with nutrient limitations. In: Roy, Saugier and Mooney, eds., *Global Production*. GCTE volume, Ch 9.
- Lovelock, C.E., J. Posada, and K. Winter. 1999. Effects of Elevated CO<sub>2</sub> and Defoliation on Compensatory Growth and Photosynthesis of Seedlings in a Tropical Tree. *Copaifera aromatica*. *Biotropica* 31: 279–287.
- , M. Popp, A. Virgo, and K. Winter. 1999. Effects of elevated CO<sub>2</sub> concentrations on photosynthesis, growth and reproduction of branches of the tropical canopy tree species, *Luebea seemannii* (Tr. & Planch.). *Plant. Cell and Environment* 22:49–59.
- Matamala, R. and B. G. Drake. 1999. The influence of atmospheric CO<sub>2</sub> enrichment on plant-soil nitrogen interactions in a wetland plant community on the Chesapeake Bay. *Plant and Soil* 210:93–101.
- Neale, P. J. 1999. Application of Spectral weighting functions in assessing the effects of environmental UV radiation. Pp. 45–55 in: D. R. Bauer and J. W. Martin [eds.], *Service Life Prediction of Organic Coatings: A Systems Approach*. American Chemical Society.
- Pierce, R. W. and Coats, D. W. 1999. The feeding ecology of *Actinophrys sol* (Sarcodina: Heliozoa) in Chesapeake Bay. *J. Euk. Microbiol.*, 46:451–457.
- Ruiz, G.M., P. Fofonoff, A.H. Hines, and E.D. Grosholz. 1999. Non-indigenous species as stressors in estuarine and marine communities: Assessing invasion impacts and interactions. *Limnol. Oceanogr.* 44:950–972.
- Smalley, G. W., Coats, D. W., and Adam, E. J. 1999. A new method using fluorescent microspheres to determine grazing on ciliates by the mixotrophic dinoflagellate *Ceratium furca*. *Aquat. Microb. Ecol.*, 17:167–179.
- Smith, L.D., M.J. Wonham, G.M. Ruiz, L.D. McCann, A.H. Hines, and J.T. Carlton. 1999. Invasion pressure to a ballast-flooded estuary and an assessment of inoculant survival. *Biological Invasions* 1:67–87.
- Stiling, P., Rossi, A.M., Hungate, B., Dijkstra, P., Hinkle, C.R., Knott, W.M., III, and B. Drake. 1999. Decreased leaf-miner abundance in elevated CO<sub>2</sub>: Reduced leaf quality and increased parasitoid attack. *Ecological Applications*, 9:240–244.
- Terwin, J.R. 1999. Blue crab, *Callinectes sapidus*, foraging behavior in Chesapeake Bay: The importance of intra-specific interactions and prey distribution. Ph.D Dissertation, Marine, Estuarine and Environmental Sciences, University of Maryland. 173 pp.
- Whigham, D.F., R.R. Twilley, and I.C. Feller. 1999. Within-stand nutrient cycling in wetland ecosystems. *Ecology* 80:2137–2138.
- , M.B. Dickinson, and N.V.T. Brokaw. 1999. Background canopy gap and catastrophic wind disturbances in tropical forests. Pp. 223–252 in: Walker, L. (ed.), *Ecosystems of disturbed ground*. Elsevier, Amsterdam.
- , L.C. Lee, M.M. Brinson, R.D. Rheinhardt, M.C. Rains, J.A. Mason, H. Khan, M.B. Ruhlman, and W.B. Nutter. 1999. Hydrogeomorphic (HGM) assessment—A test of user consistency. *Wetlands* 19:560–569.
- and A.S. Chapa. 1999. Timing and intensity of herbivory: its influence on the performance of clonal woodland herbs. *Plant Species Biology* 14: 29–38.
- 1999. Ecological consequences of wetland preservation, restoration, creation and assessment. *Science of the Total Environment* 240: 31–40.

## Smithsonian Tropical Research Institute

- Adler, Gregory H., Mangan, Scott A., and Lambert, Thomas D. 1998. "Reproductive phenology of *Cryosophila warscewiczii* in central Panama." *Principes* 42(4): 185–189.
- Adler, Gregory H., and Kestell, Douglas W. 1998. "Fates of neotropical tree seeds influenced by spiny rats (*Proechimys semispinosus*)." *Biotropica* 30(4): 677–681.
- Adler, Gregory H., Tomblin, David C., and Lambert, Thomas D. 1998. "Ecology of two species of echimyid

- rodents (*Hoplomys gymnurus* and *Proechimys semispinosus*) in central Panama." *Journal of Tropical Ecology* 14(5): 711-717.
- Andrade, Jose Luis, Meinzer, Frederick C., Goldstein, Guillermo, Holbrook, N. Michele, Cavelier, Jaime, Jackson, Paula, and Silvera, Katia. 1998. "Regulation of water flux through trunks, branches, and leaves in trees of a lowland tropical forest." *Oecologia* 115(4): 463-471.
- Arango Laws, Jessica Eileen. 1998. *Efecto de la dilución en la inactivación de bacterias coliformes totales y fecales en la Bahía de Panamá*. Unpublished tesis de licenciatura, Universidad de Panamá, Panamá.
- Ashton, Peter. 1998. "Tamiji Inoue 1947-1997." *Inside CTFS* 1998(Summer): 6.
- Backwell, Patricia, R. Y., O'Hara, Patrick D., and Christy, John, H. 1998. "Prey availability and selective foraging in shorebirds." *Animal Behaviour* 55(6): 1659-1667.
- Backwell, Patricia R. Y., Jennions, M. D., Christy, John H., and Passmore, N. I. 1999. "Female choice in the synchronously waving fiddler crab *Uca annulipes*." *Ethology* 105(5): 415-421.
- Banford, Heidi M., Bermingham, Eldredge, Collette, Bruce B., and McCafferty, S. Shawn. 1999. "Phylogenetic systematics of the *Scomberomorus regalis* (Teleostei: Scombridae) species group: molecules, morphology and biogeography of Spanish Mackerels." *Copeia* 1999(3): 596-613.
- Barahona, Gracia M., and Guzmán, Hector M. 1998. "Socio-ecological survey of resident populations in Cayos Cochinos Biological Reserve, Honduras." *Revista de Biología Tropical* 46 (Suppl. 4): 39-55.
- Barnes, Penelope A.G., and Hickman, C.S. 1998. "What controls diversity of Chemosymbiotic Lucinid Bivalves in seagrass beds? [Abstract]." *American Zoologist* 38(5): 163.
- Barnes, Penelope A.G., and Hickman, Carole S. 1999. "Lucinid bivalves and marine angiosperms: a search for causal relationships." In D.I. Wells and F.E. Walker (eds.), *The seagrass flora and fauna of Rottneest Island, Western Australia*: 216-238. Perth: Western Australian Museum.
- Bartlett, R., Pickering, John, Gauld, I., and Windsor, Donald M. 1999. "Estimating global biodiversity: Tropical beetles and wasps send different signals." *Ecological Entomology* 24(1): 118-121.
- Basset, Yves. 1999. "Diversity and abundance of insect herbivores foraging on seedlings in a rainforest in Guyana." *Ecological Entomology* 24(3): 245-259.
- Basset, Yves, Charles, Elroy, and Novotny, Vojtech. 1999. "Insect herbivores on parent trees and conspecific seedlings in a Guyana rain forest." *Selbyana* 20(1): 146-158.
- Bermingham, Eldredge, and Martin, Andrew P. 1998. "Comparative mtDNA phylogeography of neotropical freshwater fishes: testing shared history to infer the evolutionary landscape of lower Central America." *Molecular Ecology* 7(4): 499-517.
- Bermingham, Eldredge, and Moritz, C. 1998. "Comparative phylogeography: Concepts and applications." *Molecular Ecology* 7(4): 367-369.
- Bird, Maryann. 1998. "Hanging out on a limb." *Time* 1997 (special issue, December/January): 30-35.
- Brooks, Martin. 1999. "Live and let live." *New Scientist* (July 3): 32-36.
- Brooks, Robert, and Jennions, Michael D. 1999. "The dark side of sexual selection." *Trends in Ecology and Evolution* 14(9): 336-337.
- Chai, Peng, and Dudley, Robert. 1999. "Maximum flight performance of Hummingbirds: capacities, constraints, and trade-offs." *The American Naturalist* 153(4): 398-411.
- Chong, R., Mabelle J. 1999. *Aislamiento y caracterización de microhongos de interés industrial a partir de macromycetes en descomposición*. Unpublished tesis de licenciatura, Universidad de Panamá, Panamá.
- Clearwater, Michael J., Meinzer, Frederick C., Andrade, José Luis, Goldstein, Guillermo, and Holbrook, N. Michelle. 1999. "Potential errors in measurement of nonuniform sap flow using heat dissipation probes." *Tree Physiology* 19: 681-687.
- Clifton, Kenneth E., and Clifton, Lisa M. 1999. "The phenology of sexual reproduction by green algae (Bryopsidales) on Caribbean coral reefs." *Journal of Phycology* 35: 24-34.
- Cocroft, Reginald B. 1999. "Offspring-parent communication in a subsocial treehopper (Hemiptera: Membracidae: Umbonia crassicornis)." *Behaviour* 136(1): 1-21.
- Cocroft, Reginald B. 1999. "Parent-offspring communication in response to predators in a subsocial treehopper (Hemiptera: Membracidae: Umbonia crassicornis)." *Ethology* 105(7): 553-568.
- Colinvaux, Paul A. 1998. "Ice-Age Amazon and the problem of diversity (New interpretation of Pleistocene Amazonia)." *The Review of Archaeology* 19: 1-10.
- Colwell, Douglas D., and Milton, Katharine. 1998. "Development of *Alouattamyia baeri* (Diptera: Oestridae) from howler monkeys (Primates: Cebidae) on Barro Colorado Island, Panama." *Journal of Medical Entomology* 35(5): 674-680.
- Condit, Richard. 1998. "Still trying to ferret out density dependence in tree populations." *Inside CTFS* 1998 (Summer): 8, 11.
- Cooke, Richard G. 1998. "Subsistencia y economía casera de los indígenas precolombinos de Panamá, *Antropología Panameña Pueblos y Culturas*, Vol. 1: 61-134. Panamá: Editorial Universitaria.
- Cooke, Richard G. 1998. "Cupica (Chocó): a reassessment of Gerardo Reichel-Dolmatoff's fieldwork in a poorly studied region of the American tropics." In Augusto Oyuela-Caycedo, and J. Scott Raymond (eds.), *Recent Advances in the Archeology of the Northern Andes*, Vol. Monograph 39: 91-106. Los Angeles: The Institute of Archaeology, University of California.
- Cooke, Richard G. 1998. "Human settlements of Central American and northernmost South America (14,000-8000 BP)." *Quaternary International* 49/50: 177-190.
- Cooke, Richard G., and Ranere, Anthony J. 1999. "Precolumbian fishing on the Pacific coast of Panama." In

- Michael Bkale (ed.), *Pacific Latin America in prehistory: the evolution of archaic and formative cultures: 103-121*. Pullman, Wash.: WSU Press.
- Correa A., Mireya D., and Valdespino, Iván A. 1998. "Flora de Panamá: una de las más ricas y diversas del mundo." *ANCON* 5(1): 16-23.
- Correa A., Mireya D. 1998. Guía preliminar de campo: árboles y arbustos del Parque Nacional Altos de Campana, Panamá, Vol. 1-4. Chicago: Departamento de Botánica, Universidad de Panamá and Smithsonian Tropical Research Institute.
- Cox, M.L., and Windsor, Donald M. 1999. "The first instar larva of *Aulacoscelis appendiculata* n. sp. (Coleoptera: Chrysomelidae: Aulacoscelinae) and its value in the placement of the Aulacoscelinae." *Journal of Natural History* 33: 1049-1087.
- Cox, M.L., and Windsor, Donald M. 1999. "The first instar larva of *Aulacoscelis* sp. and *Megascelis puella* Lacordaire (Coleoptera: Chrysomelidae: Aulacoscelinae, Megascelinae) and their value in the placement of the Aulacoscelinae and Megascelinae." In M.L. Cox (ed.), *Advances in Chrysomelidae Biology*. Vol. 1: 51-70. Leiden, The Netherlands: Backhuys Publishers.
- Currie, Cameron R., Mueller, Ulrich G., and Malloch, David. 1999. "The agricultural pathology of ant fungus gardens." *Proceedings of the National Academy of Sciences* 96(14): 7998-8002.
- Currie, Cameron R., Scott, James A., Summerbell, Richard C., and Malloch, David. 1999. "Fungus-growing ants use antibiotic-producing bacteria to control garden parasites." *Nature* 398(6729): 701-704.
- D'Croz, Luis, Jackson, Jeremy B. C., and Best, Mairi M. R. 1998. "Siliciclastic-carbonate transitions along shelf transects through the Cayos Cochinos archipelago, Honduras." *Revista de Biología Tropical* 46 (Suppl. 4): 57-66.
- D'Croz, Luis, Robertson, D. Ross, and Martínez, José A. 1999. "Wind-induced changes in the distribution of plankton, and fish larvae in the San Blas Archipelago, Caribbean Panamá, 29th Meeting Association Marine Laboratories of the Caribbean (AMLC). July 18-24. 1999: 55. Cumaná, Venezuela.
- Dalling, James W., and Wirth, Rainer. 1998. "Dispersal of *Miconia argentea* seeds by the leaf-cutting ant *Atta colombica*." *Journal of Tropical Ecology* 14(5): 705-710.
- Dalling, James W., and Harms, Kyle E. 1999. "Damage tolerance and cotyledonary resource use in the tropical tree *Gustavia superba*." *Oikos* 85(2): 257-264.
- Danforth, Bryan N., and Wcislo, William T. 1999. "Two new and highly apomorphic species of the *Lasioglossum* subgenus *Evyllaes* (Hymenoptera: Halictidae) from Central America." *Annals of the Entomological Society of America* 92(5): 624-630.
- de Alba, Georgina. 1998. "Smithsonian Tropical Research Institute." *The Docent Educator* Autumn (1998): 6-7.
- Díaz, Claudia. 1999. *Estudio bioantropológico de rasgos mortuorios de la 'Operación 4' del sitio arqueológico Cerro Juan Díaz, Panamá Central*. Unpublished tesis de licenciatura, Universidad de Los Andes, Santafé de Bogotá.
- Doebeli, Michael, and Knowlton, Nancy. 1998. "The evolution of interspecific mutualisms." *Proceedings of the National Academy of Sciences* 95(15): 8676-8680.
- Drent, J., Van Marken Lichtenbelt, W.D., and Wikelsi, Martin. 1999. "Effects of foraging mode and season on the energetics of the Marine Iguana, *Amblyrhynchus cristatus*." *Functional Ecology* 13: 493-499.
- Dyrz, Andrzej. 1999. "Nesting of the rufescent tiger-heron *Tigrisoma lineatum* on Barro Colorado Island (Republic of Panama)." *Ornithologia Neotropical* 10: 105-106.
- Eberhard, Jessica R. 1998. "Breeding biology of the monk parakeet." *Wilson Bulletin* 110(4): 463-473.
- Flint, Stephan D., and Caldwell, Martyn M. 1998. "Solar UV-B and visible radiation in tropical forest gaps: measurements partitioning direct and diffuse radiation." *Global Change Biology* 4: 863-870.
- Flores, Yasmín. 1998. *Estudio del fitoplanton, parámetros bacteriológicos y físico-químicos del Río Pacora*. Unpublished tesis de licenciatura, Universidad de Panamá, Panamá.
- Forget, Pierre Michel, Kitajima, Kaoru, and Foster, Robin B. 1999. "Pre- and post-dispersal seed predation in *Tachigala versicolor* (Caesalpinaceae): Effects of timing of fruiting and variation among trees." *Journal of Tropical Ecology* 15(1): 61-81.
- Fortunato, Helena. 1999. "Biogeography and the tempo of speciation in strombinid gastropods, *Seventh Congress of the European Society for Evolutionary Biology*, 23-28 August: n.p. Barcelona, Spain.
- Franceschi Jara, Luiggi F., and Moreno Montilla, Tomas B. 1999. *Principales Aphyllophorales con Poros del Parque Natural Metropolitano*. Unpublished tesis de licenciatura, Universidad de Panamá, Panamá.
- Freeman, Gary. 1999. "Regional specification during embryogenesis in the inarticulate brachiopod *Discinisca*." *Developmental Biology* 209: 321-339.
- Gans, Carl, Dudley, Robert, Aguilar, Nancy M., and Graham, Jeffrey B. 1999. "Late Paleozoic atmospheres and biotic evolution." *Historical Biology* 13: 199-219.
- Gomez, Nelida E., Witte, Ludger, and Hartmann, Thomas. 1999. "Chemical defense in larval tortoise beetles: Essential oil composition of fecal shields of *Eurypedus nigrosignata* and foliage of its host plant, *Cordia curassavica*." *Journal of Chemical Ecology* 25(5): 1007-1027.
- Gonzalez, Pedro, and Lessios, Harilaos A. 1999. "Evolution of sea urchin retroviral-like (SURL) elements: Evidence from 40 echinoid species." *Molecular Biology and Evolution* 16(7): 938-952.
- Griffin, Sean P. 1998. "The effects of sunlight on the progression of black band disease." In Hector Guzman (ed.), *Marine-Terrestrial Flora and Fauna of Cayos Cochinos Archipelago, Honduras*. Vol. 46 (Suppl. 4): 175-179: *Revista de Biología Tropical*.
- Guzman, Hector M. 1998. "Prologue: Cayos Cochinos, Honduras, Where to Go?" In Hector Guzman (ed.), *Marine-Terrestrial Flora and Fauna of Cayos Cochinos Archipelago, Honduras*. Vol. 46 (Suppl. 4): 1-2: *Revista de Biología Tropical*.

- Guzman, Hector M. (ed.). 1998. *Marine-Terrestrial Flora and Fauna of Cayos Cochinos Archipelago, Honduras*. *Revista de Biología Tropical*, Vol. 46. 200 pp.
- Guzman, Hector M., and Guevara, Carlos. 1998. "Mortalidad masiva de organismos arrecifales zooxantelados durante el blanqueamiento de 1995 en Cayos Cochinos, Honduras." *Revista de Biología Tropical* 46 (Suppl. 4): 165–173.
- Guzman, Hector M., and Tudhope, Alexander W. 1998. "Seasonal variation in skeletal extension rate and stable isotopic ( $^{13}\text{C}/^{12}\text{C}$  and  $^{18}\text{O}/^{16}\text{O}$ ) composition in response to several environmental variables in the Caribbean reef coral *Siderastrea siderea*." *Marine Ecology Progress Series* 166: 109–118.
- Haberle, Simon G., and Maslin, Mark A. 1999. "Late Quaternary vegetation and climate change in the Amazon Basin based on a 50,000 year pollen record from the Amazon Fan, ODP Site 932." *Quaternary Research* 51(1): 27–38.
- Hastings, Philip A., and Robertson, D. Ross. 1999. "Acanthemblemaria atrata and Acanthemblemaria mangognatha, new species of eastern Pacific barnacle blennies (Chaenopsidae) from Isla del coco, Costa Rica, and Islas Revillagigedo, Mexico, and their relationships with other barnacle blennies." *Revue française Aquariologie* 25(3–4): 107–118.
- Heckadon-Moreno, Stanley. 1998. "Exploraciones botánicas de R.S. Williams en Coclé y Darién, 1908." *"Epocas" Segunda Era (La Prensa supplement)* 13(9): 3.
- Heckadon-Moreno, Stanley. 1998. "Exploraciones botánicas de Robert Woodson en Panamá, 1938." *"Epocas" Segunda Era (La Prensa supplement)* 13(10): 4–5.
- Heckadon-Moreno, Stanley. 1998. "El naturalista guatemalteco Enrique Arcé y las aves de Veraguas 1865–1895." *"Epocas" Segunda Era (La Prensa supplement)* 13(1): 2–3.
- Heckadon-Moreno, Stanley. 1998. "Los bosques de Chiriquí según George C. Champion." *"Epocas" Segunda Era (La Prensa supplement)* 13(3): 11.
- Heckadon-Moreno, Stanley. 1998. *Naturalistas del Istmo de Panamá*. San José, Costa Rica: Smithsonian Tropical Research Institute and Fundación Santillana para Iberoamérica.
- Heckadon-Moreno, Stanley. 1999. "Exploraciones zoológicas de Thomas Barbour en Darién, 1922." *"Epocas" Segunda Era (La Prensa supplement)* 14(1): 4–5.
- Heckadon-Moreno, Stanley. 1999. "Charles M. Breder y los peces de agua dulce de Panamá, 1924." *"Epocas" Segunda Era (La Prensa supplement)* 14(3): 4–5.
- Heckadon-Moreno, Stanley. 1999. "El diario de la exploración botánica de J.L. Steyermark al lago Alhajuela 1934–1935." *"Epocas" Segunda Era (La Prensa supplement)* 14(5): 2–3.
- Heckadon-Moreno, Stanley. 1999. "Diario de Julian Steyermark en Río Salamanca y Quebrada Ancha, 1934." *"Epocas" Segunda Era (La Prensa supplement)* 14(8): 10–11.
- Heckadon-Moreno, Stanley. 1999. "El naturista Julian Steyermark en Río Boquerón, 1934." *"Epocas" Segunda Era (La Prensa supplement)* 14(10): 2–3.
- Herre, E. Allen, Knowlton, Nancy, Mueller, U. G., and Rehner, Stuart A. 1999. "The evolution of mutualisms: Exploring the paths between conflict and cooperation." *Trends in Ecology and Evolution* 14(2): 49–53.
- Hertz, H., Wirth, R., Hölldobler, B., and Beyschlag, W. 1998. "High Rate of Leaf-Cutter Ant Colony Movements in a Tropical Forest [Abstract]." Paper presented at the Kurzbeiträge zur Tropenökologie: Abstracts of the Final DFG Symposium.
- Hickman, Carole S., and Barnes, Penelope A.G. 1999. "Fossil lucinid bivalves of Rottneest Island: anomalous Late Quaternary geographic distributions." In D.I. and Wells Walker, F.E. (ed.), *The seagrass flora and fauna of Rottneest Island, Western Australia*: 239–245. Perth: Western Australian Museum.
- Hsiao, Ting H., and Windsor, Donald M. 1999. "Historical and biological relationships among Hispinae inferred from 12S mtDNA sequence data." In M.L. Cox (ed.), *Advances in Chrysomelidae Biology*, Vol. 1: 39–50. Leiden, The Netherlands: Backhuys Publishers.
- Hubbell, Stephen P., Foster, Robin B., O'Brien, S.T., Harms, K.E., Condit, Richard, Wechsler, B., Wright, S. Joseph, and Loo de Lao, Suzanne. 1999. "Light-gap disturbances, recruitment limitation, and tree diversity in a neotropical forest." *Science* 283: 554–557.
- Ibáñez D., Roberto. 1999. "Report from Panama." *Froglog* 1999(33): 1.
- Inoue, T., Roubik, David W., and Suka, T. 1999. "Nestmate recognition in the stingless bee *Melipona panamica* (Apidae, Meliponini)." *Insectes Sociaux* 46(3): 208–218.
- Jennions, Michael D., and Backwell, Patricia R.Y. 1998. "Variation in courtship rate in the fiddler crab *Uca annulipes*: is it related to male attractiveness?" *Behavioral Ecology* 9(6): 605–611.
- Jiang, Qinhua, and Piperno, Dolores R. 1999. "Environmental and archaeological implications of a late Quaternary palynological sequence, Poyang Lake, Southern China." *Quaternary Research* 52: 250–258.
- Jiménez Ruiz, Belkis. 1999. *Avifauna asociada a las áreas boscosas de la zona de amortiguamiento del Refugio Nacional de Vida Silvestre Caño Negro, Los Chiles, Alajuela, Costa Rica*. Unpublished master's thesis, Universidad Nacional, Heredia.
- Jorge, Lucia F., Eichelbaum, Michel, Griese, Ernst-U., Inaba, Ted, and Arias, Tomás D. 1999. "Comparative evolutionary pharmacogenetics of CYP2D6 in Ngawbe and Embera Amerindians of Panama and Colombia: role of selection versus drift in world populations." *Pharmacogenetics* 9: 217–228.
- Kalko, Elisabeth K.V., Friemel, Dorothea, and Schnitzler, Hans-Ulrich. 1999. "Roosting and Foraging Behavior of Two Neotropical Gleaning Bats, *Tonatia silvicola* and *Trachops cirrhosus* (Phyllostomidae)." *Biotropica* June 1999.
- Kalko, Elisabeth K.V., and Nill, Dietmar (photographer). 1999. "Jager der nacht." *Terra* 1: 54–65.
- Kealhofer, Lisa, and Piperno, Dolores R. 1998. "Opal Phytoliths in Southeast Asian Flora." *Smithsonian Contributions to Botany* 88: 1–39.



- Knowlton, Nancy. 1998. "Hard Decisions and Hard Science: Research Needs for Coral Reef Management." In M. Hatzitolas, A.J. Hooten, and M. Fodor (eds.), *Coral Reefs: Challenges and Opportunities for Sustainable Management*: 183–187. Washington, D.C.: World Bank.
- Knudsen, Jette T. 1999. "Floral scent chemistry in geonmoid palms (Palmae: Geonomeae) and its importance in maintaining reproductive isolation." *Memoirs of the New York Botanical Garden* 83: 141–168.
- Koga, Tsunenori, Backwell, Patricia R. Y., Jennions, Michael D., and Christy, John H. 1998. "Elevated predation risk changes mating behaviour and courtship in a fiddler crab." *Proceedings of the Royal Society of London Series B Biological Sciences* 265(1404): 1385–1390.
- Korine, Carmi, and Arad, Zeev. 1999. "Changes in milk composition of the Egyptian fruit bat, *Rousettus aegyptiacus* (Pteropodidae), during lactation." *Journal of Mammalogy* 80(1): 53–59.
- Korine, C., Zinder, O., and Arad, Z. 1999. "Diurnal and seasonal changes in blood composition of the free-living Egyptian fruit bat (*Rousettus aegyptiacus*)." *Journal of Comparative Physiology B Biochemical Systemic and Environmental Physiology* 169(4–5): 280–286.
- Koulianos, S., Schmid-Hempel, R., Roubik, David W., and Schmid-Hempel, P. 1999. "Phylogenetic relationships within the corbiculate Apinae (Hymenoptera) and the evolution of eusociality." *Journal of Evolutionary Biology* 12: 380–384.
- Krause, G. Heinrich, Thiele, Alexandra, Koroleva, Olga Y., Carouge, Nicole, Barth, Carina, Schmude, Claudia, Garden, Hermann, Scholl, Silke, and Winter, Klaus. 1998. *Responses of the Photosynthetic Apparatus to High-Light/Low-Temperatures Stress in Plants from Temperate Zones and to UV Light Stress in Tropical Plants*. Paper presented at the *International Workshop on Stress Synergism in Plants—Abiotic and Biotic Stress in Photosynthesis*, 23–26 August, 1998. Tata, Hungary. Tata, Hungary.
- Lasker, Howard R., and Buddemeir, Robert W. 1999. "Coral reefs and environmental change. Adaptation, acclimation, or extinction. Coral adaptation and acclimatization: a most ingenious paradox. (Coral Reef Symposium organized by Lasker and Buddemeir)." *American Zoologist* 39(1).
- Lasker, Howard R., and Coffroth, Mary Alice. 1999. "Integration of local and regional perspectives on the species richness of coral assemblages." *American Zoologist* 39(1).
- Lasker, Howard R., Kim, Kiho, and Coffroth, Mary Alice. 1999. "Reproductive and genetic variation among Caribbean Gorgonians: the differentiation of *Plexaura kuna*, new species." *Bulletin of Marine Science* 58(1): 277–288.
- Leigh, Egbert Giles, Jr. 1999. "Levels of selection, potential conflicts, and their resolution: the role of the 'common good'." In Laurent Keller (ed.), *Levels of selection in evolution*: 15–30. Princeton: Princeton University Press.
- Leigh, Egbert Giles, Jr. 1999. *Tropical forest ecology: a view from Barro Colorado Island*. New York: Oxford University Press.
- Lerdau, Manuel T., and Throop, Heather. 1999. "Isoprene emission and photosynthesis in a tropical forest canopy: implications for model development." *Ecological Applications* 9(4): 1109–1117.
- Lessios, Harilaos A., and Lazaridou-Dimitriadou, Maria. 1998. "Mitochondrial DNA Evolution in the Greek Species of the Pulmonate Genus *Helix* [Abstract]." Paper presented at the *Abstracts, World Congress of Malacology, Washington, D.C.*, Washington, D.C.
- Lessios, Harilaos A. 1998. "The first stage of speciation as seen in organisms separated by the Isthmus of Panama." In Daniel J. Howard, and Stewart H. Berlocher (eds.), *Endless Forms*: 186–201. New York and Oxford: Oxford University Press.
- Linares, Olga F. 1998. "Glossary." In Martin H. Moynihan (ed.), *The Social Regulation of Competition and Aggression in Animals*: 117–121. Washington, D.C. and London: Smithsonian Institution Press.
- Lombardo, Elena G., and Heckadon-Moreno, Stanley. 1999. *Charlas 1996–98*: 28. Guatemala: Parque Natural Metropolitano and Smithsonian Tropical Research Institute.
- Loo de Lao, Suzanne. 1998. "El Niño Brings Drought to BCI." *Inside CTFS* 1998 (Summer): 2.
- Lopez, José V., Kersanach, Ralph, Rehner, Stephen A., and Knowlton, Nancy. 1999. "Molecular determination of species boundaries in corals: genetic analysis of the *Nontastraea annularis* complex using amplified fragment length polymorphisms and a microsatellite marker." *Biological Bulletin* 196(1): 80–93.
- Losos, Elizabeth. 1998. "Painting the Network's Future." *Inside CTFS* 1998 (Summer): 1, 13.
- Losos, Elizabeth. 1998. "Too close for comfort?" *Inside CTFS* 1998 (Summer): 8.
- Losos, Elizabeth. 1998. "CTFS Overview." *Inside CTFS* 1998 (Summer): 16.
- Lovelock, Catherine E., Virgo, Aurelio, Popp, M., and Winter, Klaus. 1999. "Effects of elevated CO<sub>2</sub> concentrations on photosynthesis, growth and reproduction of branches of the tropical canopy tree species, *Luehea seemanni* Tr. & Planch." *Plant, Cell and Environment* 22: 49–59.
- Lovelock, Catherine E., Posada, Juan, and Winter, Klaus. 1999. "Effects of elevated CO<sub>2</sub> and defoliation on compensatory growth and photosynthesis of seedlings in a tropical tree, *Copaifera aromatica*." *Biotropica* 31(2): 279–287.
- Lovette, Irby J., Bermingham, Eldredge, Seutin, Gilles, and Ricklefs, Robert E. 1998. "Evolutionary differentiation in three endemic west Indian Warblers." *Auk* 115(4): 890–903.
- Lovette, Irby J., Bermingham, Eldredge, Rohwer, Sievert, and Wood, Chris. 1999. "Mitochondrial restriction fragment length polymorphism (RFLP) and sequence variation among closely related avian species and the genetic characterization of hybrid *Dendroica* warblers." *Molecular Ecology* 8(9): 1431–1441.
- Lovette, Irby J., Bermingham, Eldredge, and Ricklefs, Robert E. 1999. "Mitochondrial DNA phylogeography and the conservation of endangered Lesser Antillean *Icterus* orioles." *Conservation Biology* 13(5): 1088–1096.



- Martin, Douglas M. 1998. "High Technology Coral Reef Monitoring Station in Cayos Cochinos." In Hector Guzman (ed.), *Marine-Terrestrial Flora and Fauna of Cayos Cochinos Archipelago, Honduras*, Vol. 46: 199–200: Revista de Biología Tropical.
- Matuse, I.T., Lim, Y.A., Hattori, M., Correa, Mireya, and Gupta, Mahabir P. 1999. "A search for anti-viral properties in Panamanian medicinal plants. The effects on HIV and its essential enzymes." *Journal of Ethnopharmacology* 64: 15–22.
- Medianero, Enrique. 1999. *Riqueza de insectos formadores de agallas en dos zonas ecológicas tropicales*. Unpublished tesis de maestría, Universidad de Panamá, Panamá.
- Mendoza H., Yaxelis G. 1998. *Identificación y Caracterización de Hongos Endomicorrízicos en Vorgia tenella Hook. (Plantae, Gentianaceae)*. Unpublished tesis de licenciatura, Universidad de Panamá, Panamá.
- Morán Ku, Alexandra. 1998. *Aislamiento de Actinomyces de Raíces de Adiantum ligidum en la Isla Barro Colorado, Panamá*. Unpublished tesis de licenciatura, Universidad de Panamá, Panamá.
- Moynihan, Martin H. 1998. *The social regulation of competition and aggression in animals*. Washington, D.C. and London: Smithsonian Institution Press.
- Nason, J. D., Herre, E. Allen, and Hamrick, James L. 1998. "The breeding structure of a tropical keystone plant resource." *Nature* 391: 685.
- Nieder, Jurgen, and Zotz, Gerhard. 1998. "Methods of Analyzing the Structure and Dynamics of Vascular Epiphyte Communities." *Biotropica* 4: 33–40.
- Ogden, John C., and Ogden, Nancy B. 1998. "Reconnaissance Survey of the Coral Reefs and Associated Ecosystem of Cayos Cochinos Archipelago, Honduras." In Hector Guzman (ed.), *Marine-Terrestrial Flora and Fauna of Cayos Cochinos Archipelago, Honduras*, Vol. 46 (Suppl. 4): 67–74: Revista de Biología Tropical.
- Oliveira, Evandro G., Srygley, Robert B., and Dudley, Robert. 1998. "Do neotropical migrant butterflies navigate using a solar compass?" *The Journal of Experimental Biology* 201: 3317–3331.
- Pandolfi, John M. 1999. "Genetic structure of coral reef organisms: Ghosts of dispersal past." *American Zoologist* 39(1).
- Peters, John M., Queller, David C., Imperatriz-Fonseca, Vera L., Roubik, David W., and Strassmann, Joan E. 1999. "Mate number, kin selection and social conflicts in stingless bees and honeybees." *Proceedings of the Royal Society of London B* 266: 379–384.
- Piperno, Dolores R., and Pearsall, Deborah M. 1998. *Origins of agriculture in the lowland neotropics*. San Diego: Academic Press.
- Piperno, Dolores R., and Holst, Irene. 1998. "The presence of starch grains on prehistoric stone tools from the humid neotropics: Indications of early tuber use and agriculture in Panama." *Journal of Archaeological Science* 25(8): 765–776.
- Piperno, Dolores R., and Pearsall, Deborah M. 1998. "The silica bodies of tropical American grasses: Morphology, taxonomy, and implications for grass systematics and fossil phytolith identification." *Smithsonian Contributions to Botany*(85): 1–40.
- Piperno, Dolores R., and Blake, Michael. 1999. "The origins and development of food production in Pacific Panama." In Michael Blake (ed.), *Pacific Latin America in prehistory: the evolution of archaic and formative cultures: 123–133*. Pullman, Wash.: WSU Press.
- Pogue, Michael G., and Aiello, Annette. 1999. "Description of the immature stages of three species of Eulepidotis Guenée (Lepidoptera: Noctuidae) with notes on their natural history." *Proceedings of the Entomological Society of Washington* 101(2): 300–311.
- Poulin, Brigitte, Wright, S. Joseph, and Calderón, Osvaldo. 1999. "Interspecific synchrony and asynchrony in the fruiting phenologies bird-dispersed plants in Panama." *Journal of Tropical Ecology* 15: 213–227.
- Pringle, Heather. 1998. "The slow birth of agriculture." *Science* 282: 1446–1450.
- Reyes, Ledis L. 1999. *Perfiles de aflatoxinas y presencia de Aspergillus flavus toxigénico en productos alimenticios*. Unpublished tesis de licenciatura, Universidad de Panamá, Panamá.
- Reynolds, Don R. 1999. "Turning over new leaves." *Terra* 36(4–5): 13–14.
- Ríos Carrera, Nivia Judith. 1999. *Determinación de Actividad Antimicrobiana en Hongos Endófitos aislados de Voryia tenella, Hook (Gentianaceae)*. Unpublished tesis de licenciatura, Universidad de Panamá, Panamá.
- Robertson, D. Ross. 1998. "Ignoring Population Structure in Community Studies." In G.P. Jones, and B.D. Doherty (eds.), *Reef Fish '95: Recruitment and Population Dynamics of Coral Reef Fishes: 161–163*. Townsville, Australia: Mapstone and L. Howett: CRC Reef Research Center.
- Robertson, D. Ross. 1998. "Shorefishes endemic to small tropical islands: long-term persistence in high-risk situations, *Fisheries Society of the British Isles Symposium on Tropical Fish Biology, Southampton July 13–16, Abstracts: 46–47*. Southampton.
- Robertson, D. Ross. 1998. "Implications of body size for Interspecific interactions and assemblage organization among coral-reef fishes." *Australian Journal of Ecology* 23: 252–257.
- Rodríguez S, Rafael Lucas. 1998. "Mating Behavior of Two *Pseudoxychila* Beetles (Coleoptera: Cicindelidae)." *The Canadian Entomologist* 130(6): 735–750.
- Sakai, Shoko, Momose, Kuniyasu, Yumoto, Takakazu, Nagamitsu, Teruyoshi, Nagamasu, Hidetoshi, Hamid, Abang A., and Nakashizuka, Tôhrû. 1999. "Plant reproductive phenology over four years including an episode of general flowering in a lowland dipterocarp forest, Sarawak, Malaysia." *American Journal of Botany* 86(10): 1414–1436.
- Salazar Allen, Noris and Morales, María Isabel. 1998. "Briolatina." 44 (Suppl. 4).
- Salazar Allen, Noris. 1998. "Editorial." *Briolatina* 44: 1.
- Salazar-Allen, Noris and Morales, María Isabel. 1998. "Briolatina Boletín Informativo." 43.

- Sánchez H., Luis Alberto, and Cooke, Richard G. 1999. "Quién presta y quién imita?: orfebrería e iconografía en "Gran Coclé", Panamá." *Boletín Museo del Oro* 42(Enero-Junio): 87-111.
- Santos-Granero, Fernando, and Barclay, Frederika. 1998. *Selva Central: history, economy and land use in Peruvian Amazonia*. Washington D.C.: Smithsonian Institution Press.
- Scharer, L., and Robertson, D. Ross. 1999. "Sperm and milt characteristics and male v. female gametic investment in the Caribbean reef fish, *Thalassoma bifasciatum*." *Journal of Fish Biology* 55: 329-343.
- Schimming, Thomas, Tofern, Britta, Mann, Petra, Richter, Anuschka, Jenett, Siems Kristina, Draeger, Birgit, Asano, Naoki, Gupta, Mahabir P., Correa, Mireya D., and Eich, Eckart. 1998. "Distribution and taxonomic significance of calystegines in the Convolvulaceae." *Phytochemistry* 49(7): 1989-1995.
- Skillman, John B., García, Milton, and Winter, Klaus. 1999. "Whole-plant consequences of crassulacean acid metabolism for a tropical forest understory plant." *Ecology* 80(5): 1584-1593.
- Snedden, W. Andy, and Greenfield, Michael D. 1998. "Females Prefer Leading Males: Relative Call Timing and Sexual Selection in Katydid Choruses." *Animal Behaviour* 56: 1091-1098.
- Sousa, Wayne P., and Mitchell, Betsy J. 1999. "The effect of seed predators on plant distributions: Is there a general pattern in mangroves?" *Oikos* 86(1): 55-66.
- Stotler, Raymond, Salazar-Allen, Noris, Gradstein, S. Rob, McGuinness, William, Whittemore, Alan, and Chung, Clementina. 1998. "A Checklist of the Hepatics and Anthocerotales of Panamá." *Tropical Bryology* 15: 167-195.
- Stutchbury, B.J.M., Morton, E.S., and Wiper, W.H. 1998. "Extra-Pair Mating System of a Synchronously Breeding Tropical Songbird." *Journal of Avian Biology* 29(1): 72-78.
- Summers, Kyle, Weigt, Lee A., Boag, Peter, and Bermingham, Eldredge. 1999. "The evolution of female parental care in poison frogs of the genus *Dendrobates*: Evidence from mitochondrial DNA sequences." *Herpetologica* 55(2): 254-270.
- Suzuki, Kunio, and Windsor, Donald M. 1999. "The internal reproductive system of Panamanian *Aulacoscelis* sp. (Coleoptera: Chrysomelidae, Aulacoscelinae) and comments on the systematic position of the subfamily." *Entomological Science* 2(3): 391-398.
- Swearer, Stepehn E., and Robertson, D. Ross. 1999. "Life history, pathology, and description of *Kudoa ovivora* n. sp. (Myxozoa, Myxosporae): An ovarian parasite of Caribbean labroid fishes." *Journal of Parasitology* 85(2): 337-353.
- Tejera, V.H., Roberto, Ibáñez D., and Arosemena G, G. (eds.). 1998. *El inventario biológico del Canal de Panamá. II. Estudio ornitológico, herpetológico y mastozoológico*. (Vol. Número Especial 2). Panama: *Scientia*.
- Tewfik, Alexander, Guzmán, Hector M., and Jacome, Gabriel. 1998. "Assessment of the Queen conch *Strombus gigas* (Gastropoda: Strombidae) population in Cayos Cochinos, Honduras." *Revista de Biología Tropical* 46 (Suppl. 4): 137-150.
- Tewfik, Alexander, Guzmán, Hector M., and Jacome, Gabriel. 1998. "Distribution and abundance of the spiny lobster populations (*Panulirus argus* and *P. guttatus*) in Cayos Cochinos, Honduras." *Revista de Biología Tropical* 46 (Suppl. 4): 125-136.
- Thiele, A., Krause, G.H., and Winter, Klaus. 1998. "In situ Study of Photoinhibition of Photosynthesis and Xanthophyll Cycle Activity in Plants Growing in Natural Gaps of the Tropical Forest." *Australian Journal of Plant Physiology* 25: 189-195.
- Tilman, David. 1999. "Diversity by default." *Science* 283: 495-496.
- Torres, Julio. 1998. *Efecto del crudo venezolano (BCF-24) sobre el crecimiento de la diatomea *Chaetoceros gracilis**. Unpublished tesis de licenciatura, Universidad de Panamá, Panamá.
- Torti, Sylvia D., and Coley, Phillis D. 1999. "Tropical Monodominance: A preliminary test of the Ectomycorrhizal Hypothesis." *Biotropica* June.
- Tringali, Michael D., Bert, Theresa M., Seyoum, Seifu, Bermingham, Eldredge, and Bartolacci, Danielle. 1999. "Molecular phylogenetics and ecological diversification of the transisthmian fish genus *Centropomus* (Perciformes: Centropomidae)." *Molecular Phylogenetics and Evolution* 13(1): 193-207.
- Ureña, Onanchi. 1999. *Aspectos de Flujo de Agua a Través del Xilema en Tres Especies de Arboles del Dosel Durante la Estación Seca, en la Isla de Barro Colorado*. Unpublished tesis de licenciatura, Universidad de Panamá, Panamá.
- Valderrama Cumbreira, Anayansi. 1999. *Diversidad de Insectos Minadores en un Bosque Tropical*. Unpublished tesis de maestría, Universidad de Panamá, Panamá.
- Valencia, Renato. 1998. "Preliminary Comparisons Between the Yasuní and BCI Plots." *Inside CTFS* 1998 (Summer): 3, 14.
- Ventocilla, Jorge. 1998. "Esas pequeñas plantitas." *La Prensa*: 1C.
- Wcislo, William T., and Danforth, Bryan N. 1998. "Reply from W.T. Wcislo and B.N. Danforth." *Trends in Ecology and Evolution* 13(5): 199.
- Wcislo, William T. 1999. "Transvestism hypothesis: A cross-sex source of morphological variation for the evolution of parasitism among sweat bees (Hymenoptera: Halictidae)?" *Annals of the Entomological Society of America* 92(2): 239-242.
- West-Eberhard, Mary Jane. 1998. "Evolution in the light of developmental and cell biology, and vice versa." *Proceedings of the National Academy of Sciences* 95: 8417-8419.
- Wiley, John P., Jr. 1999. "New light on diversity." *Smithsonian* 30(2): 20-23.
- Wills, Christopher. 1998. "Birth and Death in Two Tropical Rainforest." *Inside CTFS* 1998 (Summer): 9, 11.
- Windsor, Donald, Ness, Joshua, Gomez, Luis Diego, and Jolivet, Pierre H. 1999. "Species of *Aulacoscelis* Duponchel and Chevrolat (Chrysomelidae) and *Nomotus* Gorham (Languriidae) feed on fronds of Central American cycads." *Coleopterists Bulletin* 53(3): 217-231.
- Wright, S. Joseph, Carrasco, Claudio, Calderon, Osvaldo, and Paton, Steven. 1999. "The El Niño southern

- oscillation, variable fruit production, and famine in a tropical forest." *Ecology* 80(5): 1632-1647.
- Würth, Mirham K.R., Winter, Klaus, and Körner, Christian. 1998. "In situ responses to elevated CO<sub>2</sub> in tropical forest understorey plants." *Functional Ecology* 12: 886-895.
- Zeh, Jeanne A., Zeh, Adrian D., and Zeh, David W. 1999. "Dump material as an effective small-scale deterrent to herbivory by *Atta* cephalotes." *Biotropica* June 1999.
- Zotz, Gerard, Tyree, Melvin T., Patiño, S., and Carlton, M.R. 1998. "Hydraulic architecture and water use of selected species from a Lower Montane rainforest in Panama." *Trees* 12: 302-309.
- Zotz, Gerhard, and Andrade, Jose Luis. 1998. "Water relations of two co-occurring epiphytic bromeliads." *Journal of Plant Physiology* 152(4-5): 545-554.
- Zotz, Gerhard, and Ziegler, H. 1999. "Size-related differences in carbon isotope discrimination in the epiphytic orchid, *Dimerandra emarginata*." *Naturwissenschaften* 86: 34-40.
- Zotz, Gerhard. 1999. "Vegetative propagation in an epiphytic orchid occurrence and ecological relevance." *Ecotropica* 5: 65-68.

## National Science Resources Center

- National Science Resources Center. *Discovery Deck: Animal Studies*. Washington, D.C.: National Academy of Sciences, 1999.
- . *Discovery Deck: Ecosystems*. Washington, D.C.: National Academy of Sciences, 1999.
- . *Discovery Deck: Motion and Design*. Washington, D.C.: National Academy of Sciences, 1999.
- . *Discovery Deck: The Technology of Paper*. Washington, D.C.: National Academy of Sciences, 1999.

## Program for Asian Pacific American Studies

- Odo, Franklin. "The Nisei in Hawai'i," translated into Japanese as "Hawai no nisei" [translator, Miyaji Hitomi] in *Hawai Nikkei shakai no bunka to sono henyo* [Culture and Change in Hawaii's Japanese American Society: Maui in the 1920s, eds. Okita Yukuji. Kyoto: Nakanishiya, 1998].
- . "Hawaii's Japanese Americans and Public Representation," *Social Process in Hawai'i*, 1999.

## Smithsonian Institution Archives

- Christen, Catherine A., et al. "Latin American Environmentalism: Comparative Views." *Studies in Comparative International Development* 33, 2 (Summer 1998): 58-87.
- . A review of Maslow's "Footsteps in the Jungle: Adventures in the Scientific Exploration of the American Tropics." *Journal of the History of Biology* 32, 1 (Spring 1999).

- Cox, William E. "Herbert Friedmann" and Charles Wallace Richmond." *American National Biography*. New York: Oxford University Press, 1999.
- Glaser, Jane R. Editor, *IT* (Newsletter of the International Committee for the Training of Personnel (ICTOP) of the International Council of Museums) 16, no. 1 (February 1999).
- . A review of Sija Tanner-Kaplash's *Basic Museum Studies*. *UNESCO Journal, Museum International* 4 (October-December 1999).
- Henson, Pamela M. "Objects of Curious Research': the History of Science and Technology at the Smithsonian." *Isis* 90 (1999): S249-S269.
- . "Anna Botsford Comstock," "John Henry Comstock," "Harrison Gray Dyar," "Mary Jane Rathbun," and "Robert Edwards Carter Stearns." *American National Biography*. New York: Oxford University Press, 1999.
- Millikan, Frank R. "Charles H. Nichols," and "William Alanson White." *American National Biography*. New York: Oxford University Press, 1999.
- National Collections Program. *Smithsonian Institution Collection Statistics*, 1998. Washington: Smithsonian Institution Archives, 1999.
- Nelson, Clifford M. "Toward a Reliable Geologic Map of the United States, 1803-1893." In Edward C. Carter, II, ed., *Surveying the record: North American Scientific Exploration to 1930. American Philosophical Memoir* 231 (1999): 51-74.
- . "Walter Curran Mendenhall," "John Strong Newberry," "David Dale Owen," "George Otis Smith," and "William Embry Wrather." *American National Biography*. New York: Oxford University Press, 1999.
- Nelson, Clifford M. and Carol A. Edwards. "Arnold Hague." *American National Biography*. New York: Oxford University Press, 1999.
- Rothenberg, Marc. "'In Behalf of the Science of the Country': The Smithsonian and the U.S. Navy in the North Pacific in the 1850s." *Pacific Science* 52 (October 1998): 301-307.
- . "Observers, Publications and Surveys: Astronomy in the United States in 1849." *Astronomical Journal* 117 (1999): 6-8.
- . "U.S. Science Policy and Science Advice, 1840-1878." *AAAS Science and Technology Policy Yearbook*. 1999, pp. 285-291.
- . "Stephen Alexander," "Nathaniel Bowditch," "John Alfred Brashear," "Benjamin Apthorp Gould," "Theophilus Grew," "Joseph Henry," "C. H. F. Peters," "William Augustus Rogers," "Alexander Catlin Twining," "Sears Cook Walker," and "Joseph Winlock." *American National Biography*. New York: Oxford University Press, 1999.
- . [Review of] *Beyond the Ionosphere: Fifty Years of Satellite Communication*, Andrew Butrica, editor. In *The Public Historian* 21 (Winter 1999): 138-140.
- . [Review of] *The Victorian Amateur Astronomer: Independent Astronomical Research in Britain, 1820-1929*, by Alan Chapman. In *Endeavor* 23, 3 (September 1999): 136-137.
- . [Review of] *Scientific Communities in the Developing World*, Jacques Gaillard, V. V. Krishna, and Roland Waast,

- editors. In *Technology and Culture* 40 (January 1999): 171-172.
- Rothenberg, Marc and Thomas R. Williams. "Amateurs and the Society during the Formative Years." *The American Astronomical Society's First Century*, David H. DeVorkin, editor. American Astronomical Society, 1999, pp. 40-52. Smithsonian Institution Archives. *SIA Annual Report for Fiscal Year 1998*. Washington, DC: Smithsonian Institution Archives. February 1999.
- ## Smithsonian Institution Libraries
- Brashear, Ron. "John August Anderson" (1: 459-460), "Harold Delos Babcock" (1: 808-809), "Alfred Harrison Joy" (12: 288-289), "Paul Willard Merrill" (15: 361-362), "Ernest Fox Nichols" (16: 386-388), "Frederick Hanley Seares" (19: 555-556). In *American National Biography*, eds. John A. Garraty and Mark C. Carnes (New York: Oxford University Press, 1999).
- . Introduction to *Theatrum instrumentorum et machinarum*, by Jacques Dauphinois Besson (1578), digital ed. (Washington, D.C.: Smithsonian Institution Libraries, 1999). <http://www.sil.si.edu/DigitalCollections/HST/Besson/besson.htm>
- . Introduction to *AstronomiF instauratF mechanica*, by Tycho Brahe (1602), digital ed. (Washington, D.C.: Smithsonian Institution Libraries, 1999). <http://www.sil.si.edu/DigitalCollections/HST/Brahe/brahe.htm>
- . Introduction to *Systema Saturnium*, by Christiaan Huygens (1659), digital ed. (Washington, D.C.: Smithsonian Institution Libraries, 1999). <http://www.sil.si.edu/DigitalCollections/HST/Huygens/huygens.htm>
- Carr, Timothy, and Debra Shumate, compilers, "Postal Service in Colonial America: A Bibliography of Material in the Smithsonian Institution Libraries, National Postal Museum Branch." Educational Resources Information Clearinghouse (ERIC), Department of Education, document ED428772, 1999. Republished from *Philatelic Literature Review* 47, no. 1 (1998): 44-57.
- . "History of the Smithsonian's Philatelic Library," (paper presented at the American Topical Association annual meeting, July 1998). Summary in *Topical Time* 49, no. 6 (November-December, 1998): 37, 41.
- . "The Post Office Department Transfer of 1911." *Enroute* 8, no. 1 (January-March 1999): 6.
- Cline, Elaine. "The Smithsonian Institution Libraries at the Dulles Center," *The Federalist, Newsletter of the Society for History in the Federal Government* (Summer 1999).
- Dittemore, Margaret R., compiler. *Anthropology on the Internet for K-12* (Washington, D.C.: Smithsonian Institution Libraries, 1999). <http://www.sil.si.edu/SILPublications/Anthropology-K12>
- . *Anthropological Resources: A Guide to Archival, Library and Museum Collections*. Compiled by Library-Anthropology Resource Group (LARG). Lee S. Dutton, ed., pp. 147-152. New York: Garland Publishing, 1999.
- , with Jane MacLaren Walsh and Pamela M. Henson. *Expeditions: 150 Years of Smithsonian Research In Latin America*. Washington D.C.: Latin American Research Program, Department of Anthropology, Smithsonian Institution, 1999. <http://www.nmnh.si.edu/anthro/laexped>
- Hutchinson, Alvin. Review. *Life out of Bounds: Bioinvasion in a Borderless World* by Chris Bright, *Zoogoer* 28.3 (May-June 1999): 28.
- Kalfatovic, Martin R., Elaine Cline, Amy DeGroff, and Lowell Ashley. "The Smithsonian Institution Libraries Digital Information Center: Digital Outreach, E-Journals, and Traditional Reference Services," pp. 12-16, in *Computers in Libraries 1999 Proceedings*, compiled by Carol Nixon and Heide Dengler. Information Today, Inc.: Medford, N.J., 1999.
- Kalfatovic, Martin R. "John White Alexander" (1: 274-75); "William Baziotes" (2: 380-81); "George Biddle" (2: 730-31); "Adelyn Dohme Breeskin" (3: 473-74); "Elisabeth Coit" (5: 182-83); "Stuart Davis" (6: 230-32); "Richard Diebenkorn" (6: 586-87); "Burgoyne Diller" (6: 605-06); Lyonel Charles Adrian Feininger" (7: 792-94); "Robert Feke" (7: 797-98); "Isabella Stewart Gardner" (8: 706-08); "Arshile Gorky" (9: 307-09); "Keith Haring" (10: 79-80); "Sidney Janis" (11: 857-58); "Hugh Bolton Jones" (12: 201-02); "Morris Louis" (13: 944-46); "Man Ray" (14: 446-48); "Robert Mapplethorpe" (14: 467-69); "Alfred Henry Maurer" (14: 738-39); "Edward Moran" (15: 798-99); "Barnett Newman" (16: 346-48); "John Frederick Peto" (17: 401-02); "John Russell Pope" (17: 676-77); "Ad Reinhardt" (18: 323-24); "Mark Rothko" (18: 940-43); "Augusta Savage" (19: 314-15); "John Smibert" (20: 118-20); "Clyfford Still" (20: 773-75); "Elihu Vedder" (22: 312-13). In *American National Biography*, eds. John A. Garraty and Mark C. Carnes (New York: Oxford University Press, 1999).
- . "Edge of the Web: A Brief Guide to Digital Collections." *LITA Newsletter* 20.4 (Fall 1999). <http://www.lita.org/newslett/v20n4/>
- . "Edge of the Web: 'He's Dead Jim': Submerging Technologies." *LITA Newsletter* 20.3 (Summer 1999). <http://www.lita.org/newslett/v20n3/>
- . "Edge of the Web: If a Browser META TAG Comin' Cross the 'Net: Using META TAGS in HTML." *LITA Newsletter* 20.2 (Spring 1999). <http://www.lita.org/newslett/v20n2/>
- . "Edge of the Web: You Can Do that with HTML: Using Dynamic HTML." *LITA Newsletter* 20.1 (Winter 1998). <http://www.lita.org/newslett/v20n1/>
- . "Edge of the Web: What the ?XML!: Making the Web Safe for SGML." *LITA Newsletter* 19.4 (Fall 1998). <http://www.lita.org/newslett/v19n4/>
- . Review of *The Fake: Forgery and Its Place in Art* by Sandor Radnoti (1999), *Library Journal* 124.14 (September 1, 1999): 190.
- . Review of *FACTS.com*, compiled by Facts on File (1999), *Reference & User Services Quarterly* 39.1 (Fall 1999): 84-85.

- . Review of *What is Painting?: Representation in Modern Art* by Julian Bell (1999), *Library Journal* 124.11 (June 15, 1999): 73.
- . Review of *Twilight of the Intellectuals* by Hilton Kramer, ed. (1999), *Library Journal*. 124.10 (June 1, 1999): 137.
- . Review of *Scribner's American History and Culture on CD-ROM, Release 4.0* (1998), *Reference & User Services Quarterly* 38.3 (Spring 1999): 295–96.
- . Review of *Off Limits: Rutgers University and the Avant-Garde, 1957–1963* by Joan Marter, ed. (1999), *Library Journal* 124.7 (April 15, 1999): 84.
- . Review of *George Catlin: The Printed Works on CD-ROM* by the University of Cincinnati Digital Press (1998), *Reference & User Services Quarterly* 38.2 (1999): 189–90.
- . Review of *Common Man, Mythic Vision: The Paintings of Ben Shahn* by Susan Chevlowe, et al. (1998), *Library Journal* 124.6 (April 1, 1999): 90.
- . Review of *The Power of Display: A History of Exhibition Installations at the Museum of Modern Art* by Mary Anne Staniszewski (1998), *Library Journal* 124.4 (March 1, 1999): 82, 84.
- . Review of *Building the Great Cathedrals* by Francois Icher and translated by Anthony Zielonka. (1998), *Library Journal* 124.2 (February 1, 1999): 84–85.
- . Review of *The Java Programming Language* by Ken Arnold and James Gosling, second edition (1998), *Telecommunications Electronic Review (TER)* 6.1 (February 1999). <http://www.lita.org/ter/ter-6-1.html#arnold>
- . Review of *Wondrous Strange: The Wyeth Tradition* by Delaware Art Museum (1998), *Library Journal* 123.20 (December 1998): 100.
- . Review of *Raggett on HTML 4* by Dave Raggett, Jenny Lam, Ian Alexander, and Michael Kmiec (1998), *Telecommunications Electronic Review (TER)* 5.9 (October 15, 1998). <http://www.lita.org/ter/ter-5-9.html>
- . Review of *N.C. Wyeth* by David Michaelis (1998), *Library Journal* 123.17 (October 15, 1998): 64.
- . Review of *Ben Shahn: An Artist's Life* by Howard Greenfeld (1998), *Library Journal* 123.16 (October 1, 1998): 82.
- Kraft, Ned. O. "Adventures in Librarianship," monthly column in *Against the Grain*, v. 10, no. 5–v. 11, no. 3. (Charleston, S.C.: LLC, 1999).
- Overstreet, Leslie. Introduction. Joachim Johann Nepomuk Spalowsky. *Prodromus in Systema Historicum Testaceorum*. (1795 [1801 issue]). Digital edition. Washington, D.C.: Smithsonian Institution Libraries, 1999. <http://www.sil.si.edu/DigitalCollections/NHRareBooks/Spalowsky/spalowsky.htm>
- . Introduction. José Dionisio Larreategui. *Description Botanique du Chiranthodendron* (1805). Digital edition. Washington, D.C.: Smithsonian Institution Libraries, 1999. <http://www.sil.si.edu/DigitalCollections/NHRareBooks/Larreategui/larreategui.htm>
- Riley, Sheila M. Review of *Model Behavior* by Jay McInerney, *Library Journal* 123, no. 15 (September 15, 1998): 112.
- . Review of *Rescue* by Elizabeth Richards, *Library Journal* 124, no. 2 (February 1, 1999): 122.
- . Review of *Indiscretions* by Carol Doumani, *Library Journal* 124, no. 4 (March 1, 1999): 108.
- . Review of *The Queen's Bastard* by Robin Maxwell, *Library Journal* 124, no. 6 (April 1, 1999): 129.
- . Review of *The Cigarette Girl* by Carol Wolper, *Library Journal* 124, no. 13 (August 1999): 143.
- Rossignol, Lucien R., with William Terry, Ellen Greenblatt and Cynthia Hashert, "Build It So They Will Come: Blueprints for Successful Webpage Development." *Heads in the Clouds, Feet on the ground, Proceedings of the North American Serials Interest Group*, eds. J. S. Bullington, B. L. Caraway, and B. Geer, pp. 523–528. New York, London and Oxford: Haworth Press, 1999.
- Wheat, Valerie J. "The Museum Library: An Invaluable Resource for the Museum." *Caderno de Memoria Cultural*. V. 6, No. 4 (October 1998/March 1999): 120–127.
- . "A Bibliography of Disaster Recovery Resources." *History News: The Magazine of the American Association for State and Local History*. V. 54, No. 3 (Summer 1999): 31–32.

## Office of General Counsel

- Browne, Rachelle V., *Counseling the Non-Profit Entrepreneur* in Commercial Law Section Newsletter, National Bar Association, August 1999.
- Browne, Rachelle V., *Music: Licenses, Permission Forms, and Releases in the Digital Age* in Hoffman, Barbara, ed., *Exploiting Images and Image Collections in the New Media* (London: Kluwer Law International, 1999).

## Office of Public Affairs

- Blue Bulletin*. A biweekly two-to-four-page newsletter with administrative information for staff. Circulation is to every Smithsonian staff member. Editor: Colleen Hershberger.
- The Torch*. A monthly newspaper for Smithsonian employees, which highlights staff roles in research, exhibitions, collections and other activities; exhibitions "Now Showing"; classified ads; staff "Spare Time" activities; and more. Circulation is 10,500, which includes staff, volunteers, Smithsonian boards and commissions, and a list of interested individuals and organizations outside the Smithsonian. Editor: John Barrat.
- Smithsonian Institution Research Reports*. A quarterly newsletter that disseminates information on Smithsonian research to an audience of more than 60,000 readers, mostly Smithsonian Contributing Members but also scientists, scholars, libraries, museums, universities, journalists and others. Editor: Jo Ann Webb.

# The Smithsonian Institution and Its Subsidiaries, September 30, 1999

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Building	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
SI CASTLE	139,425	108,061	83,651	59,069	75,677	141,079	277,675	198,277	197,657	281,880	187,073	105,379	1,854,903
A&I	67,847	55,799	50,231	33,876	43,406	56,630	84,819	75,364	69,854	92,080	68,289	44,220	742,415
NASM	620,580	631,847	485,212	352,879	376,811	723,062	1,407,483	1,201,641	1,044,648	1,214,165	859,268	484,394	9,401,990
FREER	30,151	21,215	22,162	15,490	22,722	27,674	43,066	41,522	33,103	44,231	36,029	26,940	364,305
RENWICK	13,810	12,738	11,922	6,675	5,512	10,301	13,888	11,979	10,007	10,300	8,396	10,382	125,910
NPG	12,459	15,711	15,029	12,799	12,097	15,491	15,096	14,758	14,155	17,416	13,765	11,505	170,281
NMAA	14,506	14,808	13,926	14,307	15,981	16,831	19,587	21,689	16,228	17,199	16,206	11,305	192,573
NMAH	356,338	348,520	424,555	183,748	228,996	495,781	754,766	686,509	566,641	699,084	557,141	377,922	5,680,001
NMNH	432,310	422,267	349,993	250,481	303,807	559,212	778,883	804,407	944,294	982,159	813,973	434,594	7,076,380
HMSG	70,646	70,774	53,272	34,174	36,724	57,545	81,313	87,235	73,198	86,625	83,475	60,665	795,646
ANACOSTIA	149	1,483	1,071	700	1,818	1,685	2,741	3,319	7,359	2,453	2,355	661	25,794
C/H	11,776	12,836	14,640	13,077	8,632	10,379	6,946	7,615	8,174	6,830	6,771	903	108,579
AFRICAN ART	16,154	17,765	12,486	9,749	19,383	22,719	23,589	26,792	23,746	31,970	25,975	15,458	245,786
SACKLER	13,417	17,362	14,907	11,107	10,608	17,609	25,960	22,675	18,369	23,100	21,852	16,310	213,276
RIPLEY	12,768	11,740	7,849	6,595	11,853	12,361	16,702	37,365	49,579	79,637	63,637	23,451	333,537
NMAI	58,523	54,228	49,581	39,901	42,042	50,285	54,508	49,241	44,412	54,290	47,785	42,750	587,546
SILVER HILL	1,061	705	541	445	526	748	823	872	856	688	774	843	8,882
POSTAL	34,402	35,043	33,228	30,782	31,140	41,956	47,678	45,271	43,606	44,871	40,047	33,719	461,743
Total	1,906,322	1,852,902	1,644,256	1,075,854	1,247,735	2,261,348	3,655,523	3,336,531	3,165,886	3,688,978	2,852,811	1,701,401	28,389,547

Legend: A&I, Arts and Industries Building; SACKLER, Arthur M. Sackler Gallery, ANACOSTIA, Anacostia Museum, C/H, Cooper-Hewitt, National Design Museum; FREER, Freer Gallery of Art, HMSG, Hirshhorn Museum and Sculpture Garden, NASM, National Air & Space Museum, AFRICAN ART, National Museum of African Art, NMAA, National Museum of American Art, NMAH, National Museum of American History, NMAI, National Museum of the American Indian, NMNH, National Museum of Natural History, NPG, National Portrait Gallery; POSTAL, National Postal Museum; RENWICK, Renwick Gallery; RIPLEY, S. Dillon Ripley Center, SILVER HILL, Silver Hill Storage Facility, SI CASTLE, Smithsonian Institution Building (Castle)

## Reports of Affiliated Organizations

The John F. Kennedy Center for the Performing Arts, the National Gallery of Art, and the Woodrow Wilson International Center for Scholars were established by Congress within the Smithsonian Institution under their own boards of trustees. The Institution provides administrative services on contract to Reading Is Fundamental, Inc., an independent organization.

### John F. Kennedy Center for the Performing Arts

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The Kennedy Center is America's living memorial to President John F. Kennedy and the national center for the performing arts. The Kennedy Center commissions, produces, and presents more than 3,500 performances of music, theater, and dance from this nation and abroad. It makes the performing arts available to everyone through free and discounted performances, nurtures new works, supports American artists, and serves the nation as a leader in arts education. This year, more than 5 million people visited the Kennedy Center. The Kennedy Center's national reach was extended through touring productions, television, and the Internet. An additional 1 million people attended Kennedy Center touring productions nationwide, and more than 10 million people watched Kennedy Center television broadcasts.

The Kennedy Center has two permanent Millennium Stages dedicated to free daily 6:00 p.m. concerts. Since the program's inception, more than 500,000 people have watched the nightly concerts, 375 groups have made their Kennedy Center debuts, and more than 9,000 artists from

around the world and all 50 states have performed on the Millennium Stage. On April 1, a daily live Internet broadcast was inaugurated at [www.kennedy-center.org](http://www.kennedy-center.org).

The Kennedy Center's National Symphony Orchestra and Music Director Leonard Slatkin completed a highly successful year nationally and internationally. They performed from Beijing to Biloxi and received world recognition for being advocates of American music. Innovative festival programming was the highlight of the season and featured five festivals. The orchestra made its debut in China before President Jiang Zemin and completed a Seventh American Residency in Mississippi, where it spent 10 days in performance, including 115 education and outreach events. It also earned the highest praise yet for its Carnegie Hall concerts.

The Kennedy Center continues to build a worldwide reputation for commitment to quality in theater. Last season's highlights featured the Washington pre-Broadway premieres of *Footloose*, which broke box office records in New York, and the Tony Award-winning revival of *Annie Get Your Gun*. *Brothers of the Knight*, a Kennedy Center commission, by Debbie Allen and James Ingram, won a Helen Hayes Award for outstanding choreography. Stunning international presentations graced the stages: the American premiere of *A Hotel in the Town of NN* (Russia), *The Game of Love and Chance and Les Arts Sauts* (France), *Orfeo* (Canada), and *Manuel Mendive* (Cuba). African Odyssey completed a third season with a yearlong celebration of music, dance, and theater of the African Diaspora. Africa Fete, the center's world music tour, performed in 16 cities. The center's "Imagination Celebration" on tour included 200 nationwide performances in 82 cities and 49 states of *Tales of a Fourth Grade Nothing*, *The Nightingale*, and *Little Women*. More than 500 colleges participated in the center's annual American College Theater Festival.

The Kennedy Center's commitment to new work in dance continued with the commissioning of collaborations between

jazz composers with dance companies and choreographers: Pilobolus and the Maria Schneider Orchestra, Parsons Dance Company with Phil Woods, Paul Taylor Dance Company with the Paragon RagTime Orchestra, and Bill T. Jones with Fred Hersch. Internationally, the newly reconstructed *Ballet Suedois* by the Royal Swedish Ballet and *Swan Lake* by the legendary Stanislavsky Ballet staged their American premieres at the center.

The Kennedy Center's national reach was extended through television, touring productions, and the Internet. Six nationally televised programs emanated from the center: *The Mark Twain Prize* (Comedy Central), *The Kennedy Center Honors* (CBS), Memorial Day and July 4th National Symphony Orchestra Concerts (PBS), *Kennedy Center Presents Los Americanos* (PBS), and the *Hispanic Heritage Awards* (NBC).

The Kennedy Center solidified its commitment to the future of the performing arts in the new millennium by introducing the "First Decade Initiative" to commission a minimum of 10 new works each year of the first decade.

## National Gallery of Art

### Earl A. Powell III, Director

The National Gallery of Art serves the nation by preserving, collecting, exhibiting, and fostering the understanding of works of art at the highest possible museum and scholarly standards.

The gallery family was deeply saddened by the death of its dear friend, longtime trustee, and principal benefactor Paul Mellon on February 1. Mellon's final gift includes 183 works of art, among them 37 wax and plaster sculptures by Edgar Degas, and endowment funds for acquisitions, art education, the archives, and the Center for Advanced Study in the Visual Arts. During his lifetime, Mellon gave more than 900 works of art to the gallery.

The exhibition year began with "Van Gogh's Van Goghs: Masterpieces from the Van Gogh Museum, Amsterdam," a selection of 70 works kept together by the artist's brother and his family. The art of portraiture was featured in three exhibitions of works by John Singer Sargent, Mary Cassatt, and Jean-Auguste-Dominique Ingres. Other highlights included "Edo: Art in Japan 1615–1868," which presented nearly 300 scrolls, screens, sculptures, ceramics, textiles, and woodblock prints; Italian baroque terracottas from Russia's State Hermitage Museum; recently acquired works by 19th- and 20th-century photographers; 17th-century still life paintings, shown in the Dutch Cabinet Galleries; and "The Golden Age of Chinese Archaeology: Celebrated Discoveries from The People's Republic of China," an unprecedented exhibition of 200 archaeological artifacts and works of art dating as far back as 7,000 years.

Six years of planning and construction culminated with the opening in May of the National Gallery of Art Sculpture Garden. The garden and 10 sculptures displayed there are a gift of The Morris and Gwendolyn Cafritz Foundation.

Placed among thousands of plantings, from 40-foot trees to many varieties of groundcovers, are 17 sculptures by such outstanding post-World War II artists as Magdalena Abakanowicz, Louise Bourgeois, Scott Burton, Mark di Suvero, Barry Flanagan, Ellsworth Kelly, Sol LeWitt, Roy Lichtenstein, Joan Miro, Isamu Noguchi, Claes Oldenburg and Coosje van Bruggen, George Rickey, Lucas Samaras, Joel Shapiro, David Smith, and Tony Smith.

Among the year's purchases for the collections were a painting of soldiers playing cards and dice by the early 17th-century French artist Valentin de Boulogne; a book of landscape sketches by Oscar Bluemner, done in France and Italy; a watercolor and ink drawing by American synchromist Stanton Macdonald-Wright; an extremely rare print by the earliest known engraver, the Master of the Playing Cards; and an album of 81 drawings made in Rome by Jacques-Louis David.

Outstanding among the many gifts to the collections were an early 16th-century pen and ink drawing by Hans Suss von Kulmbach from Mrs. Neil F. Phillips; a Dürer drawing, *Female Nude Praying*, from The Ian Woodner Family Collection; a partial gift of a Raphaelle Peale still life, *A Dessert*, from Jo Ann and Julian Ganz Jr.; and a partial gift of a Georgia O'Keeffe painting, *Black, White, and Blue* from Barney Ebsworth.

Among the gifts for the photography collection were a very early Frederick and William Lengenheim photograph (1849) and works from the 1860s by Robert MacPherson and Felice Beato. Other photographers whose works were added to the collection included Berenice Abbott, Ralston Crawford, Imogene Cunningham, Roy De Carava, Robert Fichter, André Kertész, Leonard Missonne, Arnold Newman, Dorothy Norman, and August Sander.

The education division initiated two new programs: a popular monthly Saturday morning children's film program and a summer institute on museum careers for District of Columbia high school students. An electronic classroom project focusing on the *Shaw Memorial* by Augustus Saint-Gaudens was organized with the Massachusetts Corporation for Educational Technology and reached approximately 42,000 students in schools throughout the country.

## Reading Is Fundamental, Inc.

### Lynda Johnson Robb, Chairman William E. Trueheart, President and Chief Executive Officer

Reading Is Fundamental, Inc. (RIF) creates and delivers children's and family literacy programs to prepare young children to become eager and engaged readers, to motivate school-age children to discover the joys of reading, and to support children's efforts to become strong readers. In 1998, RIF served children and their families at more than 16,500 sites, including schools, libraries, community health centers,

hospitals, Head Start and Even Start sites, Native American reservations, migrant worker camps, detention centers, and homeless shelters. Through a network of 240,000 volunteers, RIF reached more than 3.5 million children nationwide.

RIF's core activity is its National Book Program, which provides motivation training and "seed money" for RIF program coordinators to purchase new books at significant discounts for free distribution to children. Building on that strong foundation, RIF is poised to reach 5 million children a year by the end of 2000. RIF places highest priority on serving the nation's neediest children—those at greatest risk of educational failure and economic hardship—with special emphasis on serving children from birth to age 11.

RIF received a five-year grant from the U.S. Department of Education's Star Schools Program to develop RIFNet, a consortium that will create and disseminate technology-based, multimedia training programs for parents, educators, and literacy volunteers to enable them to help children get ready to read and become better readers. The network, operational in 2000, will deliver programs and training via satellite and cable TV, the Internet, video, and CD-ROMs.

RIF developed Care to Read, a series of workshops to provide resources and training to caregivers in child-care centers and family-based day-care centers. Last year, Care to Read was piloted at early childhood programs and day-care centers in Delaware and Virginia.

In 1998, RIF entered year two of a landmark, multiyear program actively supported by Delaware Governor Thomas Carper and First Lady Martha Carper and the state's Department of Education. The Delaware RIF Initiative provides teacher training, literacy services, and books to every first-grade classroom in Delaware's public schools and serves every child enrolled in Head Start, Even Start, Early Childhood Assistance, and Parents-as-Teachers programs.

RIF children across the country participated in our National Reading Celebration through a series of events that culminated in the annual Reading Is Fun Week in April. An awards ceremony at the Capital Children's Museum in Washington, D.C., honored national RIF Reader winner, Harry Bates of Selma, Alabama, and winner of the National Poster Contest, José Giraldo of New York.

With a generous donation of 250,000 new books from Scholastic, Inc., RIF launched a summer reading program in Washington, D.C., that enabled every student in the city's public elementary schools to select three free new books. The program also created classroom libraries. RIF Chairman Lynda Johnson Robb and President and Chief Executive Officer William E. Trueheart presided at the kickoff event with Scholastic's President and Chief Executive Officer Richard Robinson. Joining them were U.S. Secretary of Education Richard W. Riley, Sen. James Jeffords, Sen. Charles Robb, Rep. Sheila Jackson-Lee, and District of Columbia Mayor Anthony Williams and Superintendent of Schools Arlene Ackerman.

RIF also teamed with the Washington, D.C., Public Library to launch the library's summer reading program. The program was made possible through RIF's partnership with

Best Buy, Inc., as part of the corporation's commitment to America's Promise, chaired by retired General Colin Powell. (America's Promise is dedicated to mobilizing individuals, groups, and organizations from every part of American life to build and strengthen the character and competence of youth.) RIF Chairman Lynda Johnson Robb serves as vice-chair of America's Promise.

## Woodrow Wilson International Center for Scholars

*Lee H. Hamilton, Director*

As Washington, D.C.'s nonpartisan research institution examining important issues in the humanities, social sciences and public policy, the Woodrow Wilson International Center for Scholars holds a unique place in our nation. Established by Congress in 1968 as the nation's memorial to our 28th president, the Wilson Center provides a link between the world of ideas and the world of policy making. Situated in the Ronald Reagan Building on Pennsylvania Avenue, it is a fitting place for the 150 scholars from all over the world who visit the center each year to carry out research and interact with Washington practitioners.

The Wilson Center assembles policy makers, academicians, members of Congress, scholars, and business and national leaders in more than 300 conferences and meetings per year. These lively events provide the public with the opportunity to ask questions and explore new ideas with academic and research and policy experts. The wide array of topics covered this year included the effects of C-SPAN on Congress and the political career of Slobodan Milosevic. The center's renowned Kennan Institute for Advanced Russian Studies celebrated its 25th anniversary this year.

The center is expanding its scope and activities, yet also tying more of its work to a few central themes. Three themes are key: the role of the United States in the world and issues of leadership and partnership; governance; and long-term challenges facing the United States and the world.

Six new or expanded initiatives were launched this year. First, a series of Director's Forums have brought more than a dozen notable speakers to the Woodrow Wilson Center. Sitting and former prime ministers, several ambassadors, cabinet officials, members of Congress, and other officials have spoken. The center has also begun a "Project on Sovereignty in the Digital Age," which is examining the information revolution and its profound impact on the global economy and on relations between governments and the private sector. The project explores how to balance national sovereignty with the need for new international rules in an age when the Internet and electronic commerce operate both within and beyond national borders. In addition, the center has started two new regional programs and expanded a third. Projects on Canada and on Africa are new to the center, and the Middle East Program is being expanded with a

focus on Islam and on women. These are all exciting additions to the work of the center.

The Congress Project, the sixth initiative, seeks to bring together current and former members of Congress and staff, congressional scholars, representatives of the media, and the general public to examine aspects of the policy process on Capitol Hill. The project director, a 28-year House staff veteran, developed the model for the project as a public policy scholar with a series of programs in 1998 on "The Information Age Congress and the Policy Process." The project's 1999–2000 series will look at "Congress and the Purse Strings."

*Dialogue*, the Wilson Center's award-winning weekly radio program, has continued its long-running role as a forum for showcasing the work that goes on at the center. It is pro-

duced in association with Smithsonian Productions and broadcast nationwide by the Armed Forces Radio Network. This summer, the program's host, George Liston Seay, marked a milestone in recording his 500th interview for the show. And the popular *Wilson Quarterly* remains one of the most widely circulated scholarly journals of its kind, with an annual readership of more than 60,000 subscribers.

While new initiatives were added this year, existing programs and projects continued to provide for open, fair, and nonpartisan study and dialogue. Center activities included serious discussion from the Balkans, Kosovo, Iran, and environmental policy to updates on critical nonproliferation concerns and reviews of developments in China, Japan, Russia, Europe, Brazil, and Mexico.

# Financial Report

Rick Johnson, Chief Financial Officer

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Smithsonian trust funds allow the Institution to undertake new ventures and enrich existing programs in ways that would not otherwise be possible. These funds provide the critical margin of excellence for innovative research, building and strengthening the national collections, constructing and presenting effective and up-to-date exhibitions, and reaching out to new and underrepresented audiences. In recent years, the Smithsonian has also begun to rely on trust funds to support major new construction projects.

The following sections describe the external environmental factors affecting the Institution's general financial condition, its financial status, and its planned response to changing conditions; financial results for fiscal year 1999; and organizational and financial measures being taken to ensure the continued fiscal health of the Institution.

## *Financial Perspectives*

As we move into the new millennium, the Smithsonian has made major advances in several key projects that will sustain and enhance its reputation as a world-class center for research and education. The Smithsonian's continued focus on generating new revenues through fund-raising and business activities is integral to this advancement.

The Discovery Center in the National Museum of Natural History opened in fiscal year 1999. This project provides space for new programs, a café, an IMAX® theater, and an expanded museum shop. Incremental net income from business activities in the museum will repay the funds borrowed to build this facility.

The fund-raising campaign for the Dulles Center, a major extension of the National Air and Space Museum at Dulles International Airport, continued this year. By the end of calendar year 1999, approximately 68 percent of the campaign goal of \$130 million had been received in cash and pledges. The capstone of the campaign was a \$60 million pledge from Steven F. Udvar-Hazy. Net income from business activities in this facility and pledge payments will repay planned borrowing. The project is also receiving significant support from the Commonwealth of Virginia, which includes providing the basic infrastructure for roads, landscaping, and parking.

The Smithsonian has entered into an agreement to purchase the Victor Building, an office building near the Old Patent Office Building, which houses the National Portrait Gallery, the National Museum of American Art, and the Archives of American Art. The purpose of the acquisition is to move administrative offices currently in leased space, reclaim gallery space in the Patent Office Building by relocating administrative and support functions, and provide additional program space. Fund-raising and savings from amounts currently bud-



geted for leases will service debt for this \$106 million facility. Planned occupancy is in fiscal year 2000.

The groundbreaking ceremony for the National Museum of the American Indian on the National Mall was held in 1999. The museum is scheduled to open in 2003. This project is being funded by a combination of federal appropriations and private funding. At the end of the year, plans were under way to raise the final 20 percent of the project costs.

In support of these projects, the Smithsonian established Smithsonian Business Ventures and appointed Gary M. Beer, previously president and CEO of the Sundance Group, as CEO of that organization. Smithsonian Business Ventures is a separate entity within the Institution approved by the Board of Regents with a goal of doubling business revenue in five years. The Smithsonian's national capital campaign, currently in its "quiet phase," continued to significantly increase giving to the Institution.

### *Fiscal Year 1999 Results*

Operating revenues received by the Institution in fiscal year 1999 from all sources totaled \$869.6 million. Revenue from federal appropriations accounted for \$402.6 million, and nonappropriated trust funds provided an additional \$467.0 million. When adjusted to remove auxiliary activity expenses of \$191.8 million, net revenues totaled \$677.8 million. The chart on this page reflects revenues by source and broad purpose of use.

### *Operations*

Federal operating revenue of \$344.0 million provided the core funding for ongoing programs of the Institution. The fiscal year 1999 federal appropriation of \$351.3 million represented a net increase of \$17.9 million over the fiscal year 1998 level. After reduction of \$3.4 million for one-time costs in the fiscal year 1998 budget, increases totaled \$21.3 million. The increases included \$9.1 million for mandatory increases in pay, utilities, and rent; \$6.0 million for operations of the National Museum of the American Indian; \$1.5 million for the National Museum of Natural History for operations and move costs associated with additions to the museum; and \$4.7 million to meet security system requirements that were not Year 2000 compliant.

General trust revenue was \$276.5 million, a 2 percent increase over the previous year. Donor/sponsor revenue for undesignated purposes of \$33.7 million was basically unchanged from the prior year. Sales and membership revenue rose 2 percent, reversing a decline from last year. However, the net revenue from these activities was up more than 58 percent, in part due to a reduction in expenses. This increase was the result of a major restructuring of the Smithsonian Institution Press, which eliminated unprofitable lines of business, and the success of *Smithsonian* magazine.

Revenue from donor/sponsor designated funds totaled \$123.6 million, more than doubling the amount from fiscal year 1998. Major gifts and grants included the \$60 million

pledge from Steven F. Udvar-Hazy for the National Air and Space Museum's Dulles Center and \$10 million from Polo Ralph Lauren for the Star-Spangled Banner Preservation Project at the National Museum of American History.

The Smithsonian is especially grateful to its many friends in the private sector whose generosity contributed vitally to its work. The names of major donors are listed in the Donors section of this annual report.

In fiscal year 1999, the Institution recorded \$66.9 million in revenue from contracts and grants from government agencies, a \$9.6 million increase over fiscal year 1998. Support from government agencies constitutes an important source of research funding, while also providing the granting agencies access to Smithsonian expertise and resources. As in previous years, most of these funds were provided by the National Aeronautics and Space Administration for research programs at the Smithsonian Astrophysical Observatory. One of the largest and most important projects funded was the Chandra X-ray Observatory, which is now in orbit and contributing to astrophysical knowledge. Two projects received support from Save America's Treasures, a public-private partnership between the White House Millennium Council and the National Trust for Historic Preservation: \$3.0 million for the Star-Spangled Banner Preservation Project and \$1.4 million for Apollo space program artifacts at the National Air and Space Museum.

### *Endowment*

The Institution pools its endowment funds for investment purposes into a consolidated portfolio, with each endowment purchasing shares in a manner similar to shares purchased by an investor in a mutual fund.

The Investment Policy Committee of the Board of Regents establishes investment policy and recommends the annual payout for the consolidated endowment. The Smithsonian's policies for managing the endowment are designed to achieve two objectives: to provide a stable, growing stream of payouts for current expenditures and to protect the value of the endowment against inflation and maintain its purchasing power. Current policy calls for an average payout of 4.5 percent of the average market value over the prior five years. With this payout policy, to achieve the endowment's objectives, the investment policy targets a real rate of return of 5 percent.

The market value of the endowment increased from \$580.9 million to \$658.5 million during fiscal year 1999. The total includes \$1.0 million that is not pooled with other endowment assets. The total return for the endowment, net of fees, was \$121.5 million, and transfers into the endowment totaled \$8.5 million. Offsetting these amounts was an endowment payout of \$21.0 million and a net transfer out of the endowment of \$31.4 million. The transfer moved funds to a private operating foundation that had been the recipient of the endowment payout to perform research consistent with the requirements of the endowment.

The total return on the consolidated portfolio was 21.78 percent. At the end of the fiscal year, the Institution's portfolio was invested 71 percent in equities, 28 percent in bonds,

and 1 percent in cash. The portfolio had 23 percent in foreign stocks and bonds and 77 percent in U.S. securities.

### *Construction Funds*

In fiscal year 1999, federal appropriations for construction were \$60.4 million. This amount included \$40.0 million for general repair, restoration, and code compliance projects throughout the Institution. Funds earmarked for new construction, alterations, and modifications totaled \$20.4 million. Included in this amount is \$16.0 million for the Mall museum of the National Museum of the American Indian and \$4.4 million for renovations, repairs, and master plan projects at the National Zoological Park.

Nonappropriated trust construction funds totaled \$5.9 million. Approximately \$4.4 million supported construction of facilities for the National Museum of the American Indian; \$1.0 million contributed to the reinstallation of the Janet Annenberg Hooker Hall of Geology, Gems, and Minerals at the National Museum of Natural History; \$0.3 million supported renovation of the Cooper-Hewitt, National Design Museum; and \$0.2 million went to several smaller projects.

### *Financial Position*

The Smithsonian Institution's Statement of Financial Position presents the total assets, liabilities, and net assets of the Institution. Total assets of \$1.7 billion far exceed total liabilities of \$406 million and continue to be indicative of the financial strength of the Institution. During fiscal year 1999, the most significant increases in the Institution's financial position included growth in investments of approximately \$92 million, an increase in net property and equipment of \$40 million, and the \$60 million pledge from Steven F. Udvar-Hazy.

### *Financial Management*

During the year, the Institution devoted significant resources to deal with the Year 2000 software problem. A final review by the Regents' Audit and Review Committee found the steps taken to be satisfactory, and all major systems were functioning effectively at the beginning of 2000.

Other financial management improvement initiatives undertaken in fiscal year 1999 included:

- An internal study that recommended implementation of an Enterprise Resource Planning (ERP) System. Funding has yet to be identified for the project, but it is hoped that implementation of the first module—the financial system—can begin in fiscal year 2001.
- A study to document accounting and systems architecture as the basis for implementing a new financial system and a draft of the functional requirements for a new general ledger.

- A project in the Office of the Comptroller to implement software that would facilitate accurate preparation and electronic processing of travel authorization and voucher forms. The software will be tested with selected units early in fiscal year 2000 and then rolled out to all units.
- Improved collection of amounts due under grants and contracts by the Office of Sponsored Projects as a result of automation and systems enhancement.
- Electronic Funds Transfer (EFT) for employee travel reimbursements.

Additional financial management improvement initiatives planned to start in fiscal year 2000 include the following:

- Updating and streamlining financial policies and procedures. The project includes putting policies online in a searchable format.
- Implementation of a credit card system for small purchases.
- Development of a comptroller's manual to document accounting procedures.

### *Audit Activities*

The Institution's financial statements are audited annually by KPMG LLP, an independent public accounting firm. The audit plan includes an in-depth review of the Institution's internal control structure. The KPMG LLP Independent Auditors' Report for fiscal year 1999 and the accompanying financial statements are presented on the following pages. The Smithsonian's internal audit staff, part of the Office of Inspector General, assists the external auditors and regularly audits the Institution's various programs, activities, and internal control systems. The Audit and Review Committee of the Board of Regents provides an additional level of financial oversight and review.

In accordance with the government requirement for the use of coordinated audit teams, the Defense Contract Audit Agency, the Smithsonian Office of Inspector General, and KPMG LLP coordinate the audit of grants and contracts received from federal agencies.

### *Smithsonian Institution at a Glance*

- 16 museums and galleries
- 400 buildings in 5 states, Washington, D.C., and Panama
- 19,000 acres
- 6.6 million square feet of owned space
- 31.4 million visits in 1999 (including an estimated 3 million at the National Zoo)
- 141 million objects, works of art, and specimens
- 40 million hits per month at the Smithsonian Web site ([www.si.edu](http://www.si.edu))
- 2.1 million members of the Smithsonian Associates

# FINANCIAL REPORT

RICK JOHNSON, CHIEF FINANCIAL OFFICER

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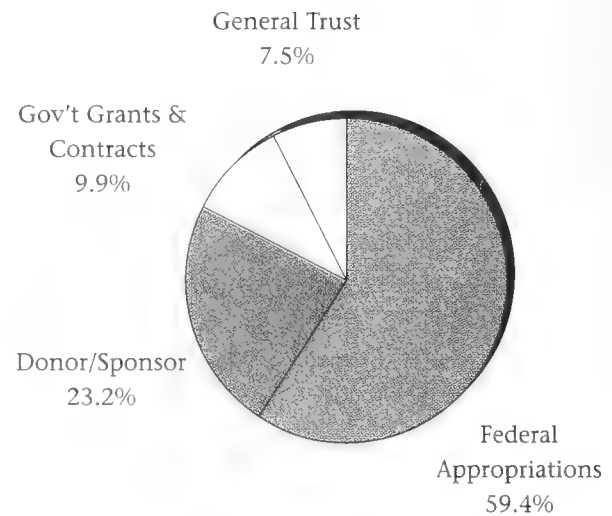
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### FY 1999 Sources of Net Revenues



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### Fiscal Year 1999 Sources of Gross/Net Revenues

	Gross Revenues (\$ millions)	Net* Revenues (\$ millions)	Percent Net Revenues (%)
<i>Operations</i>			
Federal Appropriations	402.6	402.6	59.4
General Trust **	242.7	50.9	7.5
Donor/Sponsor **	157.4	157.4	23.2
Gov't Grants & Contracts	66.9	66.9	9.9
<b>Total Sources for Operations</b>	<b>869.6</b>	<b>677.8</b>	<b>100.0</b>

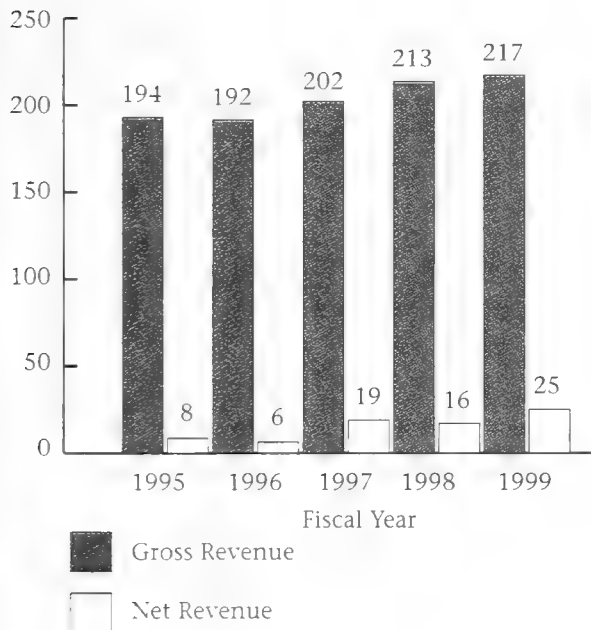
\*Net of expenses related to revenue-generating activities, e.g., museum shops, restaurants, publications, etc.

\*\* General trust is reduced from Table 1 by the Donor/Sponsor Contributions.

for operations of the National Museum of the American Indian; \$1.5 million for the National Museum of Natural History for operations and move costs associated with additions to the museum; and \$4.7 million to meet security system requirements that were not Year 2000 compliant.

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**Sales and Membership Activities (\$ millions)**



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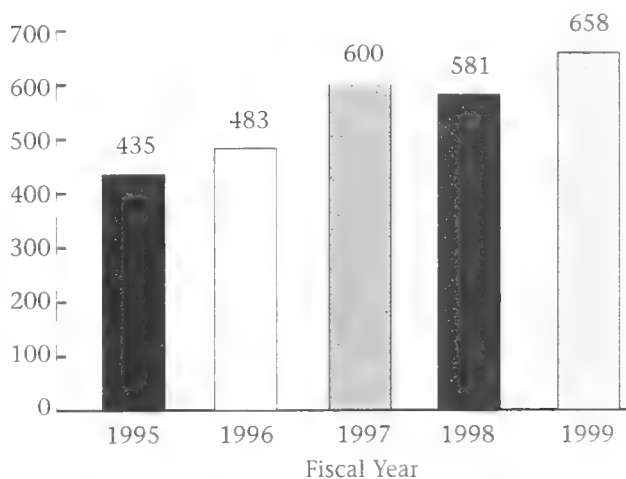
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**Endowment**

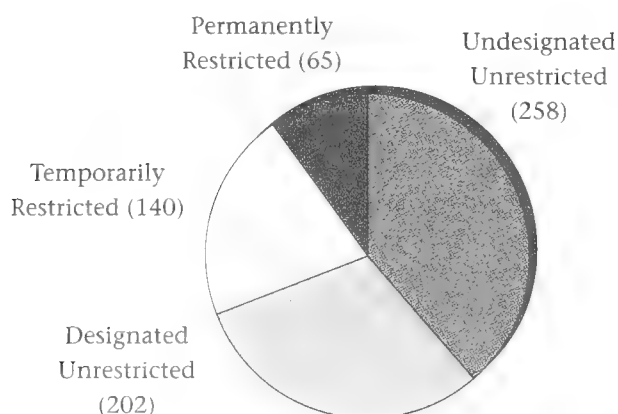
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**Market Value of Endowment (\$ millions)**



### FY 1999 Endowment and Similar Activities Net Assets (\$ millions)



mends the annual payout for the consolidated endowment. The Smithsonian's policies for managing the endowment are designed to achieve two objectives: to provide a stable, growing stream of payouts for current expenditures and to protect the value of the endowment against inflation and maintain its purchasing power. Current policy calls for an average payout of 4.5 percent of the average market value over the prior five years. With this payout policy, to achieve the endowment's objectives, the investment policy targets a real rate of return of 5 percent.

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Nonappropriated trust construction funds totaled \$5.9 million. Approximately \$4.4 million supported construction of facilities for the National Museum of the American Indian; \$1.0 million contributed to the reinstallation of the Janet Annenberg Hooker Hall of Geology, Gems, and Minerals at the National Museum of Natural History; \$0.3 million supported renovation of the Cooper-Hewitt, National Design Museum; and \$0.2 million went to several smaller projects.

### Financial Position

The Smithsonian Institution's Statement of Financial Position presents the total assets, liabilities, and net assets of the Institution. Total assets of \$1.7 billion far exceed total liabilities of \$406 million and continue to be indicative of the financial strength of the Institution. During fiscal year 1999, the most significant increases in the Institution's financial position included growth in investments of approximately \$92 million, an increase in net property and equipment of \$40 million, and the \$60 million pledge from Steven F. Udvar-Hazy.

### Financial Management

During the year, the Institution devoted significant resources to deal with the Year 2000 software problem. A final review by the Regents' Audit and Review Committee found the steps taken to be satisfactory, and all major systems were functioning effectively at the beginning of 2000.

Other financial management improvement initiatives undertaken in fiscal year 1999 included:

- An internal study that recommended implementation of an Enterprise Resource Planning (ERP) System. Funding has yet to be identified for the project, but it is hoped that implementation of the first module—the financial system—can begin in fiscal year 2001.

- A study to document accounting and systems architecture as the basis for implementing a new financial system and a draft of the functional requirements for a new general ledger.
- A project in the Office of the Comptroller to implement software that would facilitate accurate preparation and electronic processing of travel authorization and voucher forms. The software will be tested with selected units early in fiscal year 2000 and then rolled out to all units.
- Improved collection of amounts due under grants and contracts by the Office of Sponsored Projects as a result of automation and systems enhancement.
- Electronic Funds Transfer (EFT) for employee travel reimbursements.

Additional financial management improvement initiatives planned to start in fiscal year 2000 include the following:

- Updating and streamlining financial policies and procedures. The project includes putting policies online in a searchable format.
- Implementation of a credit card system for small purchases.
- Development of a comptroller's manual to document accounting procedures.

#### **Audit Activities**

The Institution's financial statements are audited annually by KPMG LLP, an independent public accounting firm. The audit plan includes an in-depth review of the Institution's internal control structure. The KPMG LLP Independent Auditors'

#### **Smithsonian Institution At a Glance**

- 16 museums and galleries
- 400 buildings in 5 states, Washington, D.C., and Panama
- 19,000 acres
- 6.6 million square feet of owned space
- 31.4 million visits in 1999 (including an estimated 3 million at the National Zoo)
- 141 million objects, works of art, and specimens
- 40 million hits per month at the Smithsonian Web site ([www.si.edu](http://www.si.edu))
- 2.1 million members of the Smithsonian Associates

Report for fiscal year 1999 and the accompanying financial statements are presented on the following pages. The Smithsonian's internal audit staff, part of the Office of Inspector General, assists the external auditors and regularly audits the Institution's various programs, activities, and internal control systems. The Audit and Review Committee of the Board of Regents provides an additional level of financial oversight and review.

In accordance with the government requirement for the use of coordinated audit teams, the Defense Contract Audit Agency, the Smithsonian Office of Inspector General, and KPMG LLP coordinate the audit of grants and contracts received from federal agencies.

**Table 1. Source and Application of Institutional Resources for the Year Ended September 30, 1999 (\$000)**

	Trust Funds				Total Trust Funds	Total FY 1999
	Federal Funds	General Trust	Donor/Sponsor Designated	Government Grants & Contracts		
<b>REVENUE &amp; GAINS:</b>						
Federal Appropriations	344,042	—	—	—	—	343,691
Endowment Payout & Investment Income	—	17,337	6,636	—	23,973	23,973
Government Grants and Contracts	—	—	—	66,868	66,868	66,868
Donor / Sponsor	—	33,714	117,068	—	150,782	150,782
Sales and Membership	—	217,296	—	—	217,296	217,296
Construction	58,547	—	—	—	—	58,898
Other	—	8,134	—	—	8,134	8,134
<b>TOTAL REVENUE &amp; GAINS</b>	<b>402,589</b>	<b>276,481</b>	<b>123,704</b>	<b>66,868</b>	<b>467,053</b>	<b>869,642</b>
<b>EXPENSES:</b>						
<i>Museums &amp; Research Institutes:</i>						
Anacostia Museum and Center for African American History and Culture	1,727	893	129	—	1,022	2,749
Archives of American Art	1,580	144	631	—	775	2,355
Arthur M. Sackler Gallery/Freer Gallery of Art	5,690	4,321	1,736	—	6,057	11,747
Center for Folklife Programs & Cultural Studies	1,754	1,105	1,137	—	2,242	3,996
Center for Materials Research and Education	3,046	82	4	—	86	3,132
Cooper-Hewitt, National Design Museum	2,871	2,801	1,190	17	4,008	6,879
Hirshhorn Museum & Sculpture Garden	4,305	4,328	187	—	4,515	8,820
National Air and Space Museum	13,338	3,815	4,115	338	8,268	21,606
National Museum of African Art	4,000	360	43	—	403	4,403
National Museum of American Art (incl. Renwick)	7,631	2,125	1,333	—	3,458	11,089
National Museum of American History	19,108	3,081	5,408	18	8,507	27,615
— National Postal Museum	571	149	2,512	3,164	5,825	6,396
National Museum of the American Indian	13,830	1,441	3,401	62	4,904	18,734
National Museum of Natural History	39,784	4,860	8,225	3,276	16,361	56,145
— Museum Support Center	4,556	9	—	—	9	4,565
National Portrait Gallery	4,791	399	329	—	728	5,519
National Zoological Park	19,691	2,180	1,400	851	4,431	24,122
Smithsonian Astrophysical Observatory	29,049	9,712	2,548	53,640	65,900	94,949
Smithsonian Environmental Research Center	3,184	295	232	1,968	2,495	5,679
Smithsonian Tropical Research Institute	9,314	1,927	1,112	1,690	4,729	14,043
<b>Total Museums &amp; Research Institutes</b>	<b>189,820</b>	<b>44,027</b>	<b>35,672</b>	<b>65,024</b>	<b>144,723</b>	<b>334,543</b>
<i>Education, Museum &amp; Scholarly Services:</i>						
Center for Museum Studies	840	49	90	—	139	979
Education	523	466	184	18	668	1,191
Exhibits Central	2,138	98	88	—	186	2,324
Fellowships and Grants	430	1,538	105	—	1,643	2,073
International Relations	1,078	341	28	(5)	364	1,442
National Science Resources Center	217	949	858	1,792	3,599	3,816
The Provost	1,563	1,972	373	18	2,363	3,926
Smithsonian Institution Archives	1,449	142	49	—	191	1,640
Smithsonian Institution Libraries	6,157	955	138	—	1,093	7,250
Smithsonian Institution Traveling Exhibition Service	2,853	751	2,141	21	2,913	5,766
Sponsored Projects	—	1,284	—	—	1,284	1,284
<b>Total Education, Museum &amp; Scholarly Services</b>	<b>17,248</b>	<b>8,545</b>	<b>4,054</b>	<b>1,844</b>	<b>14,443</b>	<b>31,691</b>
Sales and Membership Activities (Programmatic)	1,549	183	90	—	273	1,822
America's Smithsonian	—	(275)	176	—	(99)	(99)
Prior Year Annual Appropriations	12,723	—	—	—	—	12,723
<b>Total</b>	<b>221,340</b>	<b>52,480</b>	<b>39,992</b>	<b>66,868</b>	<b>159,340</b>	<b>380,680</b>
Allocation of Facilities and Depreciation Expense	106,579	5,538	—	—	5,538	112,117
<b>Total</b>	<b>327,919</b>	<b>58,018</b>	<b>39,992</b>	<b>66,868</b>	<b>164,878</b>	<b>492,797</b>
<i>Sales and Membership Activities:</i>						
Smithsonian Press / Smithsonian Productions	—	8,637	—	—	8,637	8,637
Smithsonian Magazines	—	57,942	—	—	57,942	57,942
The Smithsonian Associates	—	33,533	—	—	33,533	33,533
SI Retail	—	68,044	—	—	68,044	68,044
Unit Sales and Membership Activities	—	23,674	—	—	23,674	23,674
<b>Total Sales and Membership Activities (including Overhead)</b>	<b>—</b>	<b>191,830</b>	<b>—</b>	<b>—</b>	<b>191,830</b>	<b>191,830</b>



**Table 1. Source and Application of Institutional Resources for the Year Ended September 30, 1999 (\$000)—(continued)**

	<b>Federal Funds</b>	Trust Funds			<b>Total Trust Funds</b>	Total FY 1999
		General Trust	Donor/ Sponsor Designated	Government Grants & Contracts		
<i>Administration:</i>						
Membership and Development . . . . .	—	2,632	100	—	2,732	2,732
Administrative Offices (Net of Overhead Recovery) . . . . .	32,084	2,249	101	—	2,350	34,434
<b>Total Administration before Allocation of Facilities and Depreciation Expense . . . . .</b>	<b>32,084</b>	<b>4,881</b>	<b>201</b>	<b>—</b>	<b>5,082</b>	<b>37,166</b>
Allocation of Facilities and Depreciation Expense . . . . .	14,533	417	—	—	417	14,950
<b>Total Administration. . . . .</b>	<b>46,617</b>	<b>5,298</b>	<b>201</b>	<b>—</b>	<b>5,499</b>	<b>52,116</b>
Facilities Services . . . . .	91,013	1,058	(260)	—	798	91,811
Depreciation . . . . .	30,099	4,897	—	—	4,897	34,996
Allocation of Facilities Services and Depreciation to Functions	(121,112)	(5,955)	—	—	(5,955)	(127,067)
<b>Total Facilities Services and Depreciation . . . . .</b>	<b>—</b>	<b>—</b>	<b>(260)</b>	<b>—</b>	<b>(260)</b>	<b>(260)</b>
<b>TOTAL EXPENSES . . . . .</b>	<b>374,536</b>	<b>255,146</b>	<b>39,933</b>	<b>66,868</b>	<b>361,947</b>	<b>736,483</b>
Endowment Return Reinvested . . . . .	—	69,363	31,065	—	100,428	100,428
Return of Gift and Appreciation . . . . .	—	—	(44,823)	—	(44,823)	(44,823)
Proceeds from Collections . . . . .	—	1,000	—	—	1,000	1,000
<b>Net increase in net assets . . . . .</b>	<b>28,053</b>	<b>91,698</b>	<b>70,013</b>	<b>—</b>	<b>161,711</b>	<b>189,764</b>
<b>Net assets, beginning of the year . . . . .</b>	<b>426,271</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>718,432</b>	<b>1,144,703</b>
<b>Net assets, end of the year . . . . .</b>	<b>454,324</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>880,143</b>	<b>1,334,467</b>

## Independent Auditors' Report

BOARD OF REGENTS

SMITHSONIAN INSTITUTION:

We have audited the accompanying statement of financial position of the Smithsonian Institution (Smithsonian) as of September 30, 1999, and the related statements of financial activity and cash flows for the year then ended. These financial statements are the responsibility of the Smithsonian's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of

material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Smithsonian Institution as of September 30, 1999, and its changes in net assets and its cash flows for the year then ended, in conformity with generally accepted accounting principles.

Washington, D.C.  
January 14, 2000

KPMG LLP

### SMITHSONIAN INSTITUTION Statement of Financial Position

September 30, 1999  
(\$000)

	Trust Funds	Federal Funds	Total Funds	
			1999	1998
<b>Assets:</b>				
Cash and balances with the U.S. Treasury	3,539	206,813	210,352	205,829
Receivables and advances (note 3)	134,542	20,139	154,681	84,281
Prepaid and deferred expenses, and other (notes 2 and 5)	21,984	—	21,984	19,963
Inventory	14,548	847	15,395	21,175
Investments (note 6)	738,521	—	738,521	646,455
Property and equipment, net (note 9)	131,266	468,978	600,244	559,842
<b>Total assets</b>	<b>1,044,400</b>	<b>696,777</b>	<b>1,741,177</b>	<b>1,537,545</b>
<b>Liabilities:</b>				
Accounts payable and accrued expenses (note 10)	43,777	50,778	94,555	89,606
Net payable for investment securities purchased	26,121	—	26,121	24,963
Deferred revenue	49,691	—	49,691	49,260
Long-term debt (note 11)	41,535	—	41,535	41,526
Deposits held for affiliates (note 12)	3,133	—	3,133	4,864
Unexpended federal appropriations (note 4)	—	191,675	191,675	182,623
<b>Total liabilities</b>	<b>164,257</b>	<b>242,453</b>	<b>406,710</b>	<b>392,842</b>
<b>Net assets:</b>				
Unrestricted:				
Funds functioning as endowments (note 7)	459,521	—	459,521	387,608
Operational balances (notes 4 and 5)	61,473	454,324	515,797	489,944
<b>Total unrestricted net assets</b>	<b>520,994</b>	<b>454,324</b>	<b>975,318</b>	<b>877,552</b>
Temporarily restricted:				
Funds functioning as endowments (note 7)	140,360	—	140,360	138,686
Donor contributions for ongoing programs	153,323	—	153,323	63,538
<b>Total temporarily restricted net assets</b>	<b>293,683</b>	<b>—</b>	<b>293,683</b>	<b>202,224</b>
Permanently restricted:				
True endowment (note 7)	63,248	—	63,248	62,972
Interest in perpetual and other trusts	2,218	—	2,218	1,955
<b>Total permanently restricted net assets</b>	<b>65,466</b>	<b>—</b>	<b>65,466</b>	<b>64,927</b>
<b>Total net assets</b>	<b>880,143</b>	<b>454,324</b>	<b>1,334,467</b>	<b>1,144,703</b>
<b>Total liabilities and net assets</b>	<b>1,044,400</b>	<b>696,777</b>	<b>1,741,177</b>	<b>1,537,545</b>

See accompanying notes to the financial statements.

**SMITHSONIAN INSTITUTION**  
**Statement of Financial Activity**

Year ended September 30, 1999

(\$000)

	Unrestricted			Temporarily Restricted Trust Funds	Permanently Restricted Trust Funds	Total	
	Trust Funds	Federal Funds	Total			1999	1998
Operating revenue:							
Government revenue:							
Federal appropriations (note 4)	—	402,589	402,589	—	—	402,589	393,032
Government grants and contracts	66,868	—	66,868	—	—	66,868	59,972
Total government revenue	66,868	402,589	469,457	—	—	469,457	453,004
Contributions:							
Program support (note 7)	28,079	—	28,079	22,775	3,449	54,303	63,742
Construction of facilities (note 16)	—	—	—	64,609	—	64,609	3,815
Total contributions	28,079	—	28,079	87,384	3,449	118,912	67,557
Business activities and other:							
Short-term investment income (note 8)	2,946	—	2,946	5	—	2,951	2,380
Endowment payout (note 8)	14,391	—	14,391	6,123	508	21,022	19,726
Private grants	5,635	—	5,635	26,235	—	31,870	10,348
Rentals, fees, and commissions	8,134	—	8,134	—	—	8,134	8,335
Business activities (note 15)	217,296	—	217,296	—	—	217,296	213,109
Total business activities and other	248,402	—	248,402	32,363	508	281,273	253,898
Total operating revenues	343,349	402,589	745,938	119,747	3,957	869,642	774,459
Net assets released from restrictions	17,948	—	17,948	(17,948)	—	—	—
Total operating revenues, and other additions	361,297	402,589	763,886	101,799	3,957	869,642	774,459
Expenses:							
Research	69,485	80,760	150,245	—	—	150,245	144,760
Collections management	5,485	87,461	92,946	—	—	92,946	93,898
Education, public programs, and exhibitions	43,567	96,883	140,450	—	—	140,450	125,178
Business activities (note 15)	191,830	—	191,830	—	—	191,830	196,990
Administration	32,674	107,690	140,364	—	—	140,364	130,260
Advancement	12,112	—	12,112	—	—	12,112	10,561
Total expenses	355,153	372,794	727,947	—	—	727,947	701,647
Increase in net assets from operations	6,144	29,795	35,939	101,799	3,957	141,695	72,812
Endowment income reinvested (note 8)	69,363	—	69,363	31,067	(2)	100,428	(30,825)
Return of endowed gift (note 7)	—	—	—	(41,407)	(3,416)	(44,823)	—
Change in net assets related to collection items not capitalized:							
Proceeds from sale	1,000	—	1,000	—	—	1,000	737
Collection items purchased	(6,794)	(1,742)	(8,536)	—	—	(8,536)	(8,831)
Increase in net assets	69,713	28,053	97,766	91,459	539	189,764	33,893
Net assets, beginning of the year	451,281	426,271	877,552	202,224	64,927	1,144,703	1,110,810
Net assets, end of the year	520,994	454,324	975,318	293,683	65,466	1,334,467	1,144,703

See accompanying notes to the financial statements.

**SMITHSONIAN INSTITUTION****Statements of Cash Flows**

Year ended September 30, 1999

(\$000)

	Trust Funds	Federal Funds	Total Funds	
			1999	1998
Cash flows from operating activities:				
Increase in net assets	161,711	28,053	189,764	33,893
Adjustments to reconcile increase in net assets to net cash provided by operating activities:				
Proceeds from sales of collections	(1,000)	—	(1,000)	(737)
Collection items purchased	6,794	1,742	8,536	8,831
Depreciation	8,190	39,829	48,019	45,881
Loss on disposition of assets	135	301	436	583
Contributions for increases in endowment	(2,592)	—	(2,592)	(4,822)
Contributions for construction of property	(64,609)	—	(64,609)	(3,815)
Appropriations for repair, restoration and construction	—	(60,400)	(60,400)	(68,850)
Investment income restricted for long-term investment	(506)	—	(506)	(462)
Provision for doubtful accounts	737	—	737	277
Net realized and unrealized loss (gain) on investments	(102,332)	—	(102,332)	26,505
Decrease (increase) in assets:				
Receivables and advances	(71,275)	(4,073)	(75,348)	(20,023)
Prepaid and deferred expenses, and other	(2,021)	—	(2,021)	1,293
Inventory	5,706	74	5,780	(2,216)
Increase (decrease) in liabilities:				
Accounts payable and accrued expenses	3,003	1,946	4,949	804
Deferred revenue	431	—	431	(3,097)
Deposits held for others	(1,731)	—	(1,731)	931
Unexpended federal appropriations	—	9,052	9,052	8,823
Net cash provided by (used in) operating activities	(59,359)	16,524	(42,835)	23,799
Cash flows from investing activities:				
Proceeds from sales of collections	1,000	—	1,000	737
Collection items purchased	(6,794)	(1,742)	(8,536)	(8,831)
Purchase of property and equipment	(19,852)	(69,005)	(88,857)	(89,810)
Purchases of investment securities	(946,739)	—	(946,739)	(712,267)
Proceeds from the sales of investment securities	958,163	—	958,163	672,929
Net cash used in investing activities	(14,222)	(70,747)	(84,969)	(137,242)
Cash flows from financing activities:				
Contributions for increases in endowment	6,803	—	6,803	8,571
Contributions for construction of property	64,609	—	64,609	3,815
Appropriations for repair, restoration and construction	—	60,400	60,400	68,850
Investment income restricted for long-term purposes	506	—	506	462
Proceeds from issuance of debt	—	—	—	40,526
Repayments of debt	9	—	9	—
Net cash provided by financing activities	71,927	60,400	132,327	122,224
Net increase (decrease) in cash and balances with the U.S. Treasury	(1,654)	6,177	4,523	8,781
Cash and balances with the U.S. Treasury:				
Beginning of the year	5,193	200,636	205,829	197,048
End of the year	3,539	206,813	210,352	205,829

Cash paid for interest during fiscal years 1999 and 1998 was approximately \$2,000,000 and \$1,332,000, respectively.

See accompanying notes to the financial statements.

**SMITHSONIAN INSTITUTION****Notes to the Financial Statement**

September 30, 1999

(in thousands)

**(1) Organization**

The Smithsonian Institution (Smithsonian) was created by act of Congress in 1846 in accordance with the terms of the will of James Smithson of England, who, in 1826, bequeathed his property to the United States of America "to found at Washington, under the name of the Smithsonian Institution, an establishment for the increase and diffusion of knowledge among men." After receiving the property and accepting the trust, Congress vested responsibility in the Smithsonian Board of Regents (Board) to administer the trust.

The Smithsonian is a museum, education and research complex consisting of 16 museums and galleries, the National Zoological Park, and other research facilities. Research is carried out in the Smithsonian's museums and facilities throughout the world. The Smithsonian's extensive collections number over 140 million objects. During fiscal year 1999, over 28 million individuals visited the Smithsonian museums and other facilities.

The Smithsonian receives its funding from federal appropriations, private gifts and grants, government grants and contracts, investment income, and various business activities. Business activities include Smithsonian magazines and other publications, a mail-order catalogue, museum shops, and concession income from food services.

A substantial portion of the Smithsonian's annual operating budget is funded from annual federal appropriations. Certain construction projects have been completely funded from federal appropriations, while others are funded using amounts raised from private sources, or by a combination of federal and private funds.

Federal operating and construction funding are both subject to the annual federal appropriations process, and therefore the potential exists for reductions in approved federal funding that would significantly impact the Smithsonian's operations.

These financial statements do not include the accounts of the National Gallery of Art, the John F. Kennedy Center for the Performing Arts, or the Woodrow Wilson International Center for Scholars, which were established by Congress within the Smithsonian, but are administered by independent boards of trustees.

**(2) Summary of Significant Accounting Policies**

These financial statements present the financial position, financial activity, and cash flows of the Smithsonian on the accrual basis of accounting. Funds received from direct federal appropriations are reported as Federal Funds in the financial statements. All other funds are reported as Trust Funds.

**(a) Trust Funds**

Trust funds revenues arise primarily from contributions, grants and contracts, net investment income, and business

activities. Trust funds net assets are classified and reported as follows:

*Unrestricted net assets*

Net assets that are not subject to any donor-imposed or other legal stipulations on the use of the funds. Funds functioning as endowments in this category represent unrestricted assets which have been designated by management or the Board for long-term investment.

*Temporarily restricted net assets*

Net assets subject to donor-imposed stipulations on the use of the assets that may be met by actions of the Smithsonian and/or the passage of time. Funds functioning as endowments in this category represent donor-restricted contributions that have been designated by management or the Board for long-term investment. Donor contributions represent unspent gifts and promises-to-give of cash and securities subject to donor-imposed restrictions which have not yet been met.

*Permanently restricted net assets*

Net assets subject to donor-imposed stipulations that the principal be maintained permanently by the Smithsonian. Generally, the donors of these assets permit the Smithsonian to use all or part of the income earned on investment of the assets for either general or donor-specified purposes.

**(b) Federal Funds**

The Smithsonian receives federal appropriations to support the Smithsonian's operating salaries and expenses, repair and restoration of facilities, and construction. Federal appropriation revenue is classified as unrestricted and recognized as an exchange transaction as expenditures are incurred. The liability reported as unexpended appropriations represents amounts received either (1) which have not yet been obligated, or (2) for which goods or services have been ordered but not yet received.

The Smithsonian was appropriated \$351,344 for operations and \$60,400 for construction or repair and restoration in fiscal year 1999. Federal appropriations for operations are generally available for obligation only in the year received. In accordance with Public Law 101-510, these annual appropriations are maintained by the Smithsonian for five years following the year of appropriation, after which the appropriation account is closed and any unexpended balances are returned to the U.S. Treasury. During fiscal year 1999, the Smithsonian returned \$1,644 to the U.S. Treasury which represents the unexpended balance for fiscal year 1994.

Federal appropriations for construction or repair and restoration of facilities and construction are generally available for obligation until expended.

**(c) Use of Estimates**

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the

reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates, however, management does not believe that actual results will be materially different from those estimates.

**(d) Fair Value of Financial Instruments**

The carrying value of bond obligations in the financial statements exceeds the fair market value by approximately \$3,756 at September 30, 1999.

The carrying value of all other financial instruments in the financial statements approximates fair market value.

**(e) Cash and Balances with U.S. Treasury**

Amounts represent cash deposited with financial institutions, balances held by the U.S. Treasury that are available for disbursement, and a repurchase agreement totaling \$3,272 at September 30, 1999.

**(f) Investments**

The Smithsonian's marketable equity and debt securities are reported at fair value based on quoted market prices. Changes in fair value are recognized in the statement of financial activity. Purchases and sales of investments are recorded on the trade date. Investment income is recorded when earned. As mandated by Congress, the Smithsonian maintains two Treasury investments totalling \$1,000 relating in part to the original James Smithson gift.

The Smithsonian uses the "total return" approach to investment management of pooled true endowment funds and quasi-endowment funds, referred to collectively as the endowment. Each year, the endowment pays out an amount for current expenditures based upon a number of factors evaluated and approved by the Board of Regents. Based on approved Board policy, if the market value of any endowment fund is less than 110 percent of the historical value, the current payout is limited to the actual interest and dividends allocable to that fund.

The difference between the total return (i.e., dividends, interest and net gain or loss), and the payout is reinvested when there is an excess of total return over payout, or withdrawn from previously accumulated returns when there is a deficiency of total return to payout. The difference is reported as non-operating income or loss in the statement of financial activity.

**(g) Contributions Receivable**

All contributions receivable are reported net of estimated uncollectible amounts. Contributions expected to be collected beyond one year are also discounted to present value based on current U.S. Treasury rates. Conditional contributions receivable are not recorded until material conditions have been met.

**(h) Inventories**

Inventories are reported at the lower of cost or market, and consist primarily of merchandise inventory, books, recordings, and office supplies. Cost is determined using the first-in, first-out method.

**(i) Deferred Revenue and Expense**

Revenue from subscriptions to *Smithsonian* magazine and *Air & Space/Smithsonian* magazine is recognized over the period of the subscription, generally one year.

Promotion production expenses are recognized when related advertising materials are released. Direct-response advertising relating to the magazines is deferred and amortized over one year. At September 30, 1999, prepaid and deferred expenses include \$6,926 of deferred promotion costs, mostly related to the *Smithsonian* magazine. Promotion expense totaled \$15,967 in fiscal year 1999 and is reported within Business Activities on the statement of financial activity.

**(j) Split Interest Agreements and Perpetual Trusts**

Split interest agreements with donors consist primarily of irrevocable charitable remainder trusts and charitable gift annuities. For the charitable remainder trusts, contribution revenue and assets are recognized at fair value on the date the trusts are established. Assets are adjusted during the term of the trusts for changes in the value of the assets, accretion of discounts, and other changes in the estimated future benefits. For the charitable gift annuities, assets are recognized at fair value on the date the annuity agreements are established. An annuity liability is recognized at the present value of future cash flows expected to be paid to the donor and contribution revenue is recognized as the difference between the assets and liability. Liabilities are adjusted during the term of the annuities for payments to donors, accretion of discounts and changes in the life expectancy of the donor.

The Smithsonian is also the beneficiary of certain perpetual trusts held and administered by others. The present values of the estimated future cash receipts from the trusts are recognized as assets and contribution revenue at the dates the trusts are established. Distributions from the trusts are recorded as contributions and the carrying value of the assets is adjusted for changes in the estimates of future receipts.

**(k) Property and Equipment**

Property and equipment purchased with federal or trust funds are capitalized at cost. Property and equipment acquired through transfer from government agencies are capitalized at net book value or fair value, whichever is more readily determinable. Property and equipment acquired through donation are capitalized at appraised value at the

date of the gift. These assets are depreciated on a straight-line basis over their estimated useful lives as follows:

Buildings	30 years
Major renovations	15 years
Equipment	3–10 years

Certain lands occupied by the Smithsonian's buildings, primarily located in the District of Columbia, Maryland and Virginia, were appropriated and reserved by Congress for the Smithsonian's use. The Smithsonian serves as trustee of these lands for as long as they are used to carry out the Smithsonian's mission. These lands are titled in the name of the U.S. government and are not reflected in the accompanying financial statements.

#### **(l) Collections**

The Smithsonian acquires its collections, which include works of art, library books, photographic archives, objects and specimens, by purchase using federal or trust funds or by donation. All collections are held for public exhibition, education, or research, furthering the Smithsonian's mission to increase and diffuse knowledge to the public. The Smithsonian protects and preserves its collections, which total more than 140 million items. The Smithsonian's Collections Management policy includes guidance on the preservation, care and maintenance of the collections and procedures relating to the accession/deaccession of items within the collections.

The Smithsonian's policy is to not capitalize its collections, therefore, no value is assigned to the collections on the statement of financial position. Purchases of collection items are recorded as expense in the year in which the items are acquired. Contributed collection items are not reflected in the financial statements. Proceeds from deaccessions or insurance recoveries from lost or destroyed collection items are reflected as increases in the appropriate net asset class, and are designated for future collection acquisitions.

Items that are acquired with the intent at the time of acquisition not to add them to the collections but rather to sell, exchange, or otherwise use them for financial gain are not considered collection items, and are recorded at fair market value at date of acquisition as other assets in the statement of financial position.

#### **(m) Annual Leave**

The Smithsonian's civil service employees earn annual leave in accordance with federal laws and regulations. Separate internal policies apply for trust employees. Annual leave for all employees is recognized as expense when earned.

#### **(n) Government Grants and Contracts**

The Smithsonian receives grants and enters into contracts with the U.S. government and state and local governments, which primarily provide for cost reimbursement to the Smithsonian. Revenue from governmental grants and

contracts is classified as unrestricted and is recognized as reimbursable expenditures are incurred.

#### **(o) Contributions**

The Smithsonian recognizes revenue from all contributions as revenue in the period unconditional promises are received.

Unrestricted contributions with payments due in future periods are initially recorded as temporarily restricted support, and are reclassified to unrestricted net assets when payments become due.

When donor restrictions are met on temporarily restricted contributions, the related net assets are reclassified as released from restrictions in the accompanying statement of financial activity.

Gifts of long-lived assets are recorded as unrestricted revenue in the period received. Contributions of cash and other assets restricted to the acquisition of long-lived assets are recorded as temporarily restricted revenue in the period received. The donor's restrictions expire and the related net assets are released from restriction when the long-lived asset is placed in service by the Smithsonian.

In-kind contributions of goods and services totaling \$7,115 were received in fiscal year 1999 and recorded as program support in the accompanying statement of financial activity. The nature of the in-kind contributions includes donated space and interactive multimedia software programs.

A substantial number of volunteers also make significant contributions of time to the Smithsonian, enhancing its activities and programs. In fiscal year 1999, more than 5,400 volunteers contributed approximately 476,000 hours of service to the Smithsonian. The value of these contributions is not recognized in the financial statements.

#### **(p) Advancement**

The Smithsonian raises private financial support from individual donors, corporations and foundations to fund programs and other initiatives. Funds are also generated through numerous membership programs. Fund-raising costs are expensed as incurred and reported as advancement expense in the statement of financial activity. Membership program costs are amortized over membership terms, typically one year, and are also reported as Advancement expenses.

#### **(q) Comparative Financial Statements**

The statement of financial activity includes certain prior-year summarized comparative information in total but not by net asset class. Such information does not include sufficient detail to constitute a presentation in conformity with generally accepted accounting principles. Accordingly, such information should be read in conjunction with the Smithsonian's financial statements for the year ended September 30, 1998, from which the summarized information was derived.

**(r) Reclassifications**

Certain amounts have been reclassified in prior year to conform with the current year presentation.

**(3) Receivables and Advances**

Receivables and advances consisted of the following at September 30, 1999:

	Trust	Federal	Total
Trade receivables, net of \$1,618 in allowances	18,252	—	18,252
Contributions receivable, net (note 3a)	101,799	—	101,799
Grants and contracts	10,048	—	10,048
Accrued interest and dividends	805	—	805
Advance payments (note 3b)	1,048	20,139	21,187
Charitable trust	2,590	—	2,590
Total receivables and advances	<u>134,542</u>	<u>20,139</u>	<u>154,681</u>

**(a) Contributions Receivable**

Contributions receivable (pledges) are recorded as revenue when unconditional promises are received. Pledges for which payment is not due within one year are discounted based on rates earned by U.S. Treasury obligations with corresponding maturities. As of September 30, 1999, the aggregate discounted contributions receivable was as follows:

Due within:		
Less than 1 year		30,017
1 to 5 years		83,765
More than 5 years		<u>4,680</u>
		118,462
Less:		
Allowance for uncollectible pledges		(3,812)
Discount to present value (at rates ranging from 4.43 to 6.45%)		<u>(12,851)</u>
Contributions receivable, net		<u>101,799</u>

At September 30, 1999, the Smithsonian has outstanding conditional contributions totaling \$15,500 which will be recognized if and when the specific conditions are met.

**(b) Advance Payments**

At September 30, 1999, federal advance payments of approximately \$20,139 represent prepayments made to government agencies, educational institutions, firms and individuals for services to be rendered, or property or materials to be furnished.

At September 30, 1999, advance payments included amounts paid to the General Services Administration of \$10,591 for equipment purchases for the Museum Support Center and other projects to be completed in future years.

**(4) Reconciliation of Federal Appropriations**

Federal appropriation revenue recognized in fiscal year 1999 can be reconciled to the federal appropriations received in fiscal year 1999 as follows:

	Salaries and Expenses	Repair and Restoration and Construction	Total
Federal appropriation revenue	344,042	58,547	402,589
Unexpended 1999 appropriation	55,107	60,400	115,507
Amounts expended from			
prior years	(46,268)	(58,547)	(104,815)
Other funding	(1,537)	—	(1,537)
Fiscal year 1999 federal appropriations	<u>351,344</u>	<u>60,400</u>	<u>411,744</u>

Federal expenses recognized in fiscal year 1999 can be reconciled to the federal appropriations received in fiscal year 1999 as follows:

	Salaries and Expenses	Repair and Restoration and Construction	Total
Federal expenses	341,856	30,938	372,794
Unexpended 1999 appropriation	55,107	60,400	115,507
Depreciation	(8,891)	(30,938)	(39,829)
Supplies consumption	(74)	—	(74)
Gain (loss) on disposition of assets	(301)	—	(301)
Unfunded annual leave	(748)	—	(748)
Amounts expended from			
prior years	(46,268)	(58,547)	(104,815)
Capital expenditures	10,458	58,547	69,005
Collection items purchased	1,742	—	1,742
Other funding	(1,537)	—	(1,537)
Fiscal year 1999 federal appropriations	<u>351,344</u>	<u>60,400</u>	<u>411,744</u>

Federal unrestricted net assets primarily represent the Smithsonian's net investment in property, plant and equipment purchased with or constructed using federal appropriated funds.

Unexpended appropriations for all fiscal years total \$191,675 at September 30, 1999, and consist of \$80,882 in unexpended operating funds, \$66,565 in unexpended repair and restoration funds and \$44,228 in unexpended construction funds. Unexpended operating funds include amounts for the Museum Support Center move and the National Museum of the American Indian. Unexpended repair and restoration funds represent amounts available



for on-going major repair and restoration of the Smithsonian's museums and facilities. Unexpended construction funds represent amounts appropriated but not yet expended for construction of new facilities.

#### (5) Accessions and Deaccessions

For fiscal year 1999, \$6,794 of trust funds and \$1,742 of federal funds were spent to acquire collection items. Proceeds from trust fund deaccessions were \$1,000. There were no deaccessions of collection items purchased with federal funds in fiscal year 1999. At September 30, 1999, accumulated proceeds and related earnings from deaccessions amounted to \$17,270 and are designated within unrestricted net assets for collections acquisition in the trust funds.

Non-cash deaccessions result from the exchange, donation, or destruction of collection items, and occur because objects deteriorate, are beyond the scope of a museum's mission, or are duplicative. During fiscal year 1999, the Smithsonian's non-cash deaccessions included works of art, animals, historical objects, and natural specimens. Contributed items held for sale total \$4,060 and are included in prepaid and deferred expense and other assets in the statement of financial position.

#### (6) Investments

At September 30, 1999, investments consisted of the following:

Short-term investments:	
Cash equivalents	20,619
U.S. Government obligations	<u>32,304</u>
	<u>52,923</u>
Endowment and similar investments:	
Pooled investments:	
Cash equivalents	5,270
U.S. Government and quasi-government obligations	44,591
Corporate bonds and other obligations	163,136
Common and preferred stocks	<u>469,944</u>
Total pooled investments	682,941
Non pooled investments:	
Deposits with U.S. Treasury	<u>1,000</u>
Total endowment and similar investments	<u>683,941</u>
Gift annuity program investments:	
Cash equivalents	4
Corporate bonds and other obligations	491
Common and preferred stock	<u>1,162</u>
	<u>1,657</u>
Total investments	<u>738,521</u>

#### (7) True Endowment and Funds Functioning as Endowments

Substantially all of the investments of the endowment are pooled on a market value basis, with individual funds subscribing to or disposing of units on the basis of the per unit market value at the beginning of the month in which the transaction takes place. At September 30, 1999, the market value of the pool equated to \$721 per unit. The market value of the pool's net assets at September 30, 1999, was \$657,310. This represents all pooled investments plus or minus net receivables and payables related to unsettled investment transactions.

Each fund participating in the investment pool receives an annual payout equal to the number of units owned times the annual payout amount per unit. The payout for fiscal year 1999 was \$22.80 per unit, or 4.5 percent of the average market value of the endowment over the prior five years.

Net asset balances of the endowment consisted of the following at September 30, 1999:

Unrestricted	257,651
Unrestricted-designated	<u>201,870</u>
Total unrestricted	459,521
Temporarily restricted	140,360
Permanently restricted	<u>63,248</u>
Total endowment net assets	<u>663,129</u>

During 1999, the Smithsonian agreed to transfer the Seward Johnson Trust Fund for Oceanography (the Johnson Fund) to Harbor Branch Oceanographic Institution, Inc. (Harbor Branch), a private operating foundation. The Johnson Fund was originally received by the Smithsonian in 1969 as a permanently restricted gift of \$3,400, restricted to the development and operation of the Johnson-Sea-Link Research submersible vehicle and oceanographic research.

At the date of transfer, in February 1999, the original gift corpus and accumulated interest totaled \$44,800. The contribution is reported in the statement of financial activity as a non-operating reduction of both temporarily restricted and permanently restricted net assets, in the amounts of \$41,400 and \$3,400, respectively.

In exchange for being appointed trustee of the Johnson Fund, Harbor Branch agreed to donate 30 percent of the value of the Johnson Fund at the date of transfer to the Smithsonian from Harbor Branch's own funds. The contribution of \$13,400 is reported in the statement of financial activity as a program support contribution, increasing temporarily restricted net assets. The net affect of these related transactions is a \$31,400 reduction in net assets.

**(8) Composition of Total Return from Investments**

Total return from investments consisted of the following for the year ended September 30, 1999:

*Composition of Endowment Return:*

Endowment payout	21,022
Investment income in excess of payout	107
Total investment income	21,129
Less—investment fees	(1,479)
Net investment income	19,650
Net realized and unrealized gain on investments	101,800
Endowment total return	<u>121,450</u>

Endowment total return is reported as \$21,022 in operating revenue representing the annual payout, and the excess of \$100,428 as non-operating endowment income in the statement of financial activity.

*Composition of Short-Term Investment Total Return:*

Interest and dividends	2,419
Net gain on investments	532
Short-term investment total return	<u>2,951</u>

**(9) Property and Equipment**

Property and equipment consisted of the following at September 30, 1999:

	Trust	Federal	Total
Land	2,500	—	2,500
Buildings and capital improvements	173,416	880,153	1,053,569
Equipment	30,398	54,263	84,661
Leasehold improvements	2,623	—	2,623
	208,937	934,416	1,143,353
Accumulated depreciation	(77,671)	(465,438)	(543,109)
Total property and equipment	<u>131,266</u>	<u>468,978</u>	<u>600,244</u>

At September 30, 1999, buildings and capital improvements included \$15,197 and \$155,016 of construction in progress within Trust and Federal funds, respectively. Depreciation expense for fiscal year 1999 totaled \$8,190 in the trust funds and \$39,829 in the federal funds.

**(10) Accounts Payable and Accrued Expenses**

Accounts payable and accrued expenses consisted of the following at September 30, 1999:

	Trust	Federal	Total
Accounts payable	16,941	16,408	33,349
Accrued salaries and benefits	23,836	28,913	52,749
Other accrued liabilities	3,000	5,457	8,457
Total accounts payable and accrued expenses	<u>43,777</u>	<u>50,778</u>	<u>94,555</u>

**(11) Long-term Debt**

In January 1998, the District of Columbia issued \$41,300 of tax-exempt revenue bonds on behalf of the Smithsonian.

The Smithsonian is obligated under these bonds as follows:

Series 1997 Revenue Bonds, Serial, with interest rates ranging from 4.10% to 4.75%, maturing at various dates from February 1, 2002 through 2012:	10,950
Series 1997 Revenue Bonds Term:	
Interest rate 5.00% due February 1, 2017	7,105
Interest rate 4.75% due February 1, 2018	1,640
Interest rate 5.00% due February 1, 2028	21,625
Total bonds at face value	41,320
Less—unamortized bond discount	(785)
Total bonds payable	40,535
Interest free note, Virginia Department of Aviation	1,000
Total long-term debt	<u>41,535</u>

The serial and term bonds represent an unsecured general obligation of the Smithsonian. Proceeds from the sale of the bonds will finance certain renovations of and improvements to the National Museum of Natural History, fund capitalized interest, and pay certain costs of issuing the bonds. Interest on the bonds is payable semi-annually on August 1 and February 1, beginning on August 1, 1998. Principal and interest payments will be funded solely through unrestricted Trust funds.

The term bonds maturing on February 1, 2017 and 2028 are subject to mandatory redemption by operations of sinking fund installments. Installment payments for the term bond maturing February 1, 2017, begin on February 1, 2013 and range from \$1,285 to \$1,565 per year through the maturity date. Installment payments for the term bond maturing February 1, 2028 begin on February 1, 2019 and range from \$1,720 to \$2,665 per year through the maturity date.

Interest expense on bonds payable for fiscal year 1999 totaled \$1,334 net of capitalized interest of approximately \$666.

At September 30, 1999, the Smithsonian also had an interest-free loan from the Virginia Department of Aviation totaling \$1,000. The Virginia Department of Aviation agreed, in fiscal year 1995, to make available to the Smithsonian an interest-free loan facility totaling \$3,000, of which \$500 was drawn in fiscal years 1996 and 1997. This loan facility is intended to assist in the financing of the planning, marketing, fund-raising, and design of the proposed National Air and Space Museum extension at Washington Dulles International Airport. The Smithsonian is scheduled to repay the outstanding loan not later than June 30, 2001.

**(12) Affiliate Relationships**

The Smithsonian provides certain fiscal, procurement, facilities and administrative services to several separately incorporated affiliated organizations, not consolidated in these financial statements, for which certain officials of the Smithsonian serve on the governing boards. The amounts paid to the Smithsonian by these organizations for the above services totaled \$164 of trust funds and \$147 of federal funds for fiscal year 1999.

Deposits held in custody for these organizations at September 30, 1999, were \$3,133 and were recorded in the trust funds.

The Friends of the National Zoo (FONZ), an independent 501(c)(3) organization, raises funds for the benefit of the Smithsonian's National Zoological Park. Funds received by the Smithsonian from FONZ are recorded as unrestricted revenue and totaled \$583 in fiscal year 1999.

**(13) Employee Benefit Plans**

The federal employees of the Smithsonian are covered by either the Civil Service Retirement System (CSRS) or the Federal Employee Retirement System (FERS). The terms of these plans are defined in federal regulations. Under both systems, the Smithsonian withholds from each federal employee's salary the required salary percentage. The Smithsonian also contributes specified percentages. The Smithsonian's expense for these plans for fiscal year 1999 was \$16,912.

The Smithsonian has a separate defined contribution retirement plan for trust fund employees, in which substantially all such employees are eligible to participate. Under the plan, the Smithsonian contributes stipulated percentages of salary which are used to purchase individual annuities, the rights to which are immediately vested with the employees. Employees can make voluntary contributions, subject to certain limitations. The Smithsonian's cost of the plan for fiscal year 1999 was \$10,437.

In addition to the Smithsonian's retirement plans, the Smithsonian makes available certain health care and life insurance benefits to active and retired trust fund employees. The plan is contributory for retirees and requires payment of premiums and deductibles. Retiree contributions for premiums are established by an insurance carrier based on the average per capita cost of benefit coverage for all participants, active and retired, in the Smithsonian's plan. The following information summarizes the activity of postretirement benefit plans as of and for the year ended September 30, 1999:

Change in benefit obligation:	
Benefit obligation at September 30, 1998	10,498
Service cost	300
Interest cost	351
Actuarial gain	(6,181)
Benefits paid	(118)
Benefit obligation, September 30, 1999	4,850
Change in plan assets:	
Fair value of plan assets, September 30, 1998	234
Actual return on plan assets	19
Employer contributions	118
Refund of life insurance reserve	(253)
Benefits paid	(118)
Fair value of plan assets, September 30, 1999	—
Projected benefit obligation in excess of plan assets	(4,850)
Unrecognized transition obligation	4,564
Unrecognized net actuarial gain	(6,508)
Accrued postretirement benefit obligation	(6,794)
Components of net periodic benefit cost:	
Service cost	300
Interest cost	351
Expected return on plan assets	(19)
Amortization of transition obligation	326
Amortization of unrecognized gain	(633)
Net periodic postretirement benefit cost	325
Weighted-average assumptions as of September 30:	
Discount rate	8.25%
Expected return on plan assets	8.25%
Rate of compensation increase	3.50%

For measurement purposes, the September 30, 1999 postretirement benefit obligation was determined using a 6.5 percent annual rate of increase in the per capita cost of covered health care benefits was assumed for fiscal year 2000. The rate was assumed to decrease gradually to 4.5 percent for fiscal year 2004 and remain at that level thereafter. The effect of a one percent change in the assumed health care cost trend rate at September 30, 1999 would have resulted in an approximate \$522 increase or \$409 decrease in the postretirement benefit obligation and an approximate \$93 increase or \$71 decrease in the 1999 postretirement benefit cost.

**(14) Income Taxes**

The Smithsonian is recognized as exempt from income taxation under the provisions of Section 501(c)(3) of the Internal Revenue Code (the Code). Organizations described in that section are taxable only on their unrelated business income. Periodical advertising sales is the main source of unrelated business income. An IRS determination letter has been received supporting the Smithsonian's tax-exempt

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Unrecognized transition obligation	4,564
Unrecognized net actuarial gain	(6,508)
Accrued postretirement benefit obligation	<u>(6,794)</u>
Components of net periodic benefit cost:	
Service cost	300
Interest cost	351
Expected return on plan assets	(19)
Amortization of transition obligation	326
Amortization of unrecognized gain	(633)
Net periodic postretirement benefit cost	<u>325</u>
Weighted-average assumptions as of September 30:	
Discount rate	8.25%
Expected return on plan assets	8.25%
Rate of compensation increase	3.50%

For measurement purposes, the September 30, 1999 postretirement benefit obligation was determined using a 6.5 percent annual rate of increase in the per capita cost of covered health care benefits was assumed for fiscal year 2000. The rate was assumed to decrease gradually to 4.5 percent for fiscal year 2004 and remain at that level thereafter. The effect of a one percent change in the assumed health care cost trend rate at September 30, 1999 would have resulted in an approximate \$522 increase or \$409 decrease in the postretirement benefit obligation and an approximate \$93 increase or \$71 decrease in the 1999 postretirement benefit cost.

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The Smithsonian is recognized as exempt from income taxation under the provisions of Section 501(c)(3) of the Internal Revenue Code (the Code). Organizations described in that section are taxable only on their unrelated business income. Periodical advertising sales is the main source of unrelated business income. An IRS determination letter has been received supporting the Smithsonian's tax-exempt

status. No provision for income taxes was required for fiscal year 1999.

It is the opinion of the Smithsonian's management that the Smithsonian is also exempt from taxation as an instrumentality of the United States as defined in Section 501(c)(1) of the Code. Organizations described in that section are exempt from all income taxation. The Smithsonian has not yet formally sought such dual status.

### (15) Business Activities

A summary of business activities reported in the statement of activities for the year ended September 30, 1999 follows:

	Revenue	Expenses	Net
Magazines	72,556	57,942	14,614
The <i>Smithsonian Associates</i>	32,438	33,533	(1,095)
Museum shops and mail order	71,268	65,332	5,936
Smithsonian Institution Press	8,930	8,633	297
Concessions, licensing and other	32,104	26,390	5,714
	<u>217,296</u>	<u>191,830</u>	<u>25,466</u>

### (16) Commitments and Contingencies

#### (a) Leasing Activities

Leases for Smithsonian warehouse and office spaces provide for rent escalations to coincide with increases in property taxes, operating expenses attributable to the leased property and the Consumer Price Index. The Smithsonian has the authority to enter into leases for up to 30 years using federal funds.

The Smithsonian's operating leases for the warehouse and office spaces require future minimum lease payments as follows:

2000	13,348
2001	7,878
2002	7,748
2003	6,774
2004	5,127
Thereafter	17,287
	<u>58,162</u>

Rental expense for operating leases totaled \$16,518 for fiscal year 1999.

#### (b) Government Grants and Contracts

The Smithsonian receives funding or reimbursement from governmental agencies for various activities which are subject to audit. Audits of these activities have been completed through fiscal year 1998, however, fiscal year 1998 has not been closed with the cognizant federal audit agency. Management believes that any adjustments which may result from this audit and the audit for fiscal year 1999 will have no materially adverse effect on the Smithsonian's financial position.

#### (c) Litigation

The Smithsonian is a party to various litigation arising out of the normal conduct of its operations. In the opinion of the Smithsonian's General Counsel, the ultimate resolution of these matters will have no materially adverse effect on the Smithsonian's financial position.

#### (d) National Museum of the American Indian

The Smithsonian broke ground in September 1999 for the construction of the National Museum of the American Indian. Federal appropriations of \$73,300 are budgeted for this project. Restricted contributions collected or pledged of \$23,800 are included in temporarily restricted net assets. Additional fund-raising will provide the remainder of the funds needed. The museum is projected to open in 2003.

#### (e) National Air and Space Museum Extension

The Smithsonian is planning to build a major extension of the National Air and Space Museum at Dulles International Airport in Northern Virginia. A long-term lease has been signed for a 176.5 acre site with the Washington Area Airport Authority. Subject to Smithsonian Board of Regents' approval, access and infrastructure work will begin in Spring 2000.

The project is expected to be financed through a combination of donations, net revenues from business activities of the facility, and external borrowing. Donations and business activities revenues are projected to fully service any debt. Restricted contributions collected or pledged of \$80,000 are included in temporarily restricted net assets. The Commonwealth of Virginia is committed to expend an estimated \$34,000 on access and infrastructure improvements on the site.

#### (f) Victor Building

The Smithsonian entered into an agreement on June 24, 1999 to purchase a building known as the Victor Building, a 330,000 square foot commercial office structure in Northwest Washington, DC. The core and shell of the building has since been renovated, and the transaction for its purchase for approximately \$86,000 is expected to close in March 2000.

The building will be used to house museum support staff and central administrative staff currently in leased space. The total cost of the project (including the build out of the interior space) is estimated at \$106,000. The project will be funded through external borrowing which will be primarily serviced by fundraising and savings on currently budgeted lease costs.

#### (g) Year 2000

The Smithsonian has addressed anticipated operational issues resulting from the year 2000. Management has finalized contingency plans and is prepared to address any matters that may arise that could create potential for business interruption.







Smithsonian  
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